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ABSTRACT

This publication consists of articles that detail the state of teacher education programs in the Rocky Mountain area. The articles discuss: 1) the evaluation of college courses taught in a rural setting, 2) professional development and role models, 3) multicultural education, 4) future educational trends, 5) educational cooperation, 6) student learning skills, and 7) student employment. Several Teacher Corps projects are described. (CJ)

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TEACHER TRAINING PERSPECTIVES

SP 016 493

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TEACHER TRAINING PERSPECTIVES

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PREFACE

TEACHER TRAINING PERSPECTIVES, a thematic resource from the Rocky Mountain Teacher Corps Network of Projects, is designed as a companion to ROCKY MOUNTAIN PERSPECTIVES. The latter publication dealt in an open-ended manner with the effects of a region's natural features and styles of life on teachers and children. This publication is concerned with describing the parameters of teacher training, particularly those which illuminate contemporary issues in the field.

Public schools constitute American society's most democratic institutions; they exist as open reflections for the values and needs of the communities they serve.

In no other institutionalized profession of our society is the person (professional) so exposed to the mandates of democracy's collective wisdom and opinion in the practice of their trade. Change is a constant in the educational profession. It is possible for a local citizen to mount an effective campaign to censor a school's books and teaching materials. It is also possible for a state to require the teaching of any and all subjects in a school and the use of only state approved texts for children; additionally, it is also possible for the Federal Government to mandate conditions of schooling including the busing of children, the composition of the school's staff and how a school's budget is to be spent in compliance with the constitutional rights of children. Educators, who work in the fishbowl of democracy's free public education system, often feel the least free of its constituents to recommend and make changes within the parameters of what should be done to improve the opportunities of children.

This thematic resource contains the ideas and reflections of educators who are experienced as practitioners of teaching. All of them have taught children in public schools; all of them also are currently employed by colleges and universities in positions associated with the profession of teacher training and retraining.

We have intentionally chosen to print our TEACHER TRAINING PERSPECTIVES in a looseleaf form, so that contributions can be removed for copying and other uses, and the collection itself can be added to as the reader feels appropriate. We intend this collection to be useful and recognize its current limitations in comprehensiveness, personal bias, and diverse style of writing. We further expect that readers should and will be able to expand on our efforts.

John Clagett
Jody Dutkiewicz

May 1980

INTRODUCTION

WILLIAM H. JOHNSON
EDITOR

No greater issue faces teacher education in the coming decade than professional development. For years universities and public schools have struggled with sorting out roles and responsibilities for training teachers. Concurrently, teaching is growing increasingly complex. Universities and colleges that prepare teachers recognize that those who complete a baccalaureate program in teacher education are not fully prepared to assume the demanding roles of teaching. School districts attempt to bear some responsibility for teacher training through what is commonly called in-service. States concerned about teacher competence demand that teachers produce evidence of continual education in the form of graduate degrees or further training.

Who bears the responsibility for teacher education? It takes only a simple review to determine that (1) the individual teachers now bear most of this responsibility; (2) higher education's teacher education units feel a historical responsibility but have an overly optimistic perception of their success; (3) public schools are trying to meet needs through in-service education with little policy support and (4) states continue to maintain a position that legislative mandates related to certification is the answer.

Teacher education remains fragmented and inconsistent. For years those responsible for improving the profession of teaching have been groping for answers. Such programs as Teacher Corps seek to identify new solutions to this long standing problem and there may be some light in the tunnel. A key objective of Teacher Corps projects is to institutionalize new ways of preparing teachers and to find new ways for the interested parties to collaborate. One key to collaboration is the futher integration of university and public school efforts. Such integration assumes that both groups have a significant role in the process of preparing the professional teacher. This monograph includes a number of reports relating to how Teacher Corps projects are impacting teacher preparation. Other articles address the future and what will exist as a result of the experimentation supported through these projects.

In a sense, the future is now. One may ask whether the experimentation with new modes of delivery and new conceptual models are preparing teachers have much chance of being institutionalized. In large measure the answer rests with those now responsible for teacher education, i.e. teacher educators, public school boards, state legislators and professional teacher associations. Unless new model delivery systems are supported by policy decisions, no significant changes will result from project efforts.

The traditional normal school approach of providing a modicum of skills for the teachers to initially survive plus recent efforts of school districts to help the teacher continue to survive is simply not sufficient. No less than a revolution will move teacher training to professional education and development. The question remains as to whether Teacher Corps projects can move us forward.

I hope you will find this compilation of articles about project activities in the Rocky Mountain Teacher Corps Network both informative and provocative. Our objective for the publication is raising the interest level in new models of teacher preparation among policy makers.

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TELECONFERENCING: AN EVALUATION OF COLLEGE COURSES TAUGHT AT A RURAL TEACHER CORPS SITE

by

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May 1980

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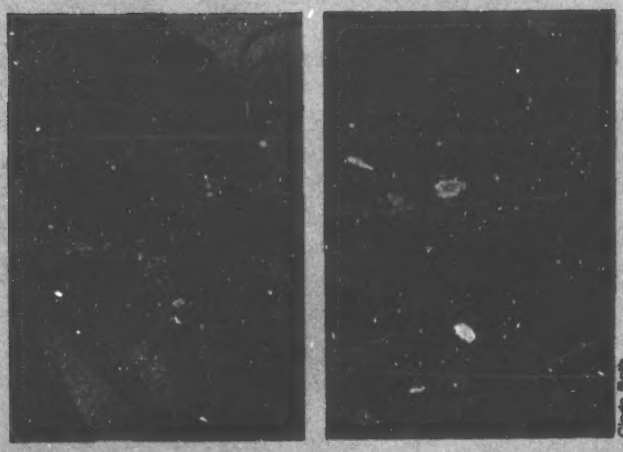
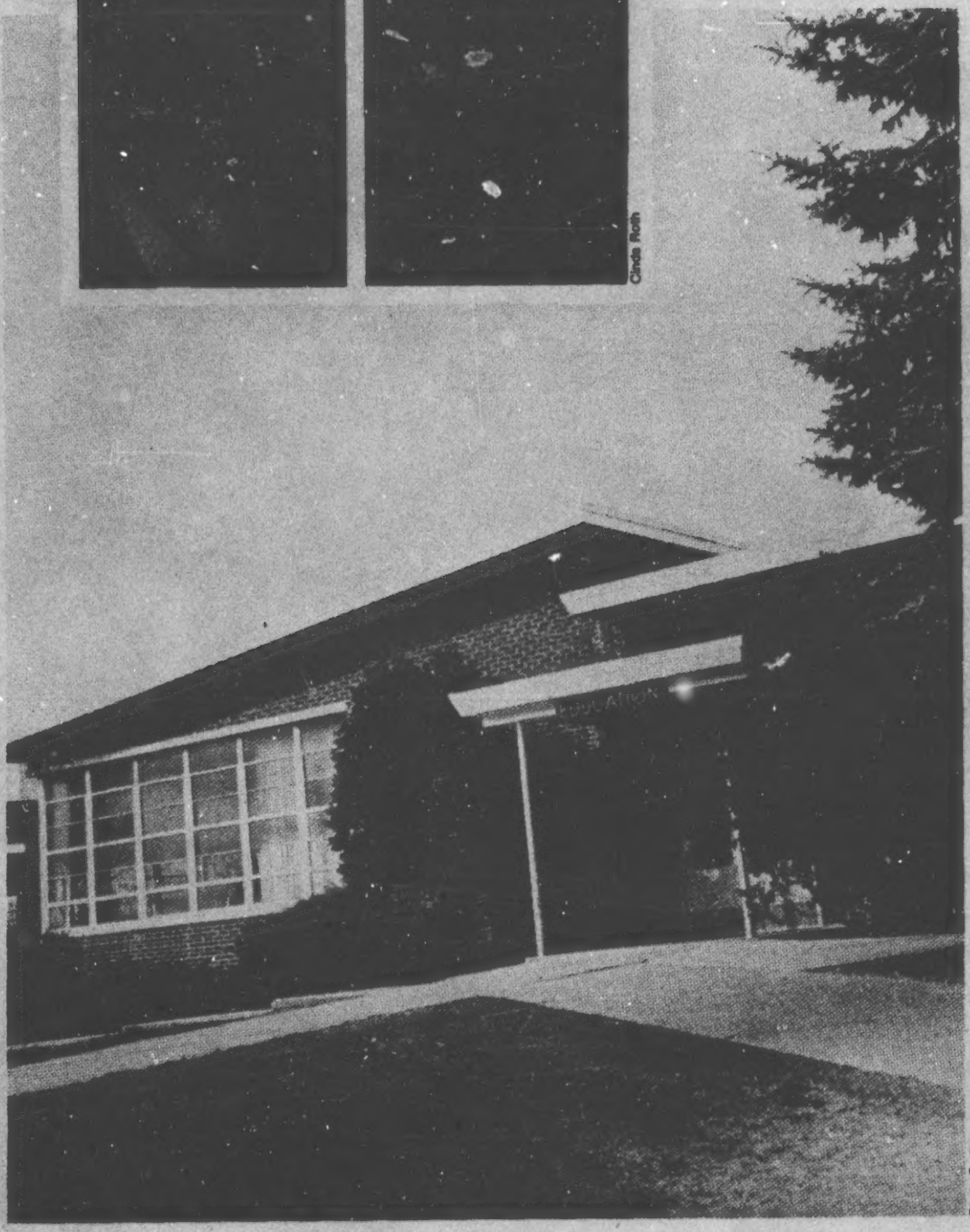


Linda Roth



Linda Roth

One of the problems being addressed by the Teacher Corps Program '78, located at Eastern Montana College, Billings, Montana, is that of delivering preservice and inservice education in rural eastern Montana. The Teacher Corps site school is located at Lame Deer, Montana, 110 miles southeast of Billings. The four Teacher Corps interns based there require the provision of courses needed for their degree programs. Courses and other inservice activities are also provided for teachers and teacher aides there. The model for inservice education typically practiced at Eastern Montana College, through its School of Extended Studies and Community Services, is for an Eastern Montana College instructor to teach a traditional off-campus extension course. With the distances involved in traveling in eastern Montana, this approach makes it difficult to respond to all identified inservice needs. The current energy crisis, with the consequence rise in the cost of gasoline, is making travel to remote locations more costly as well as inconvenient. Thus, as one means of overcoming this problem, the Teacher Corps project has been investigating alternative approaches to delivering courses to off-campus locations. The solution that is currently being explored, in collaboration with the School of Extended Studies and Community Services, is the development of an Educational Teleconferencing System (ETS).

The logistics and technical aspects of ETS are described elsewhere (Lee and Nowotny, 1980). Briefly, the system involves an instructor with a microphone and speaker located on campus, connected by telephone to a remote class with a speaker and four microphones. (With the use of a Meet-Me Bridge it is possible to add up to 20 locations, but to date there has been no call for the use of more than one location.) The system is completely interactive insofar as the students are able to respond to or question the instructor at any time via the microphones. The system was piloted at Eastern Montana College with Teacher Corps offering one course in Fall 1979. The course was Math 201, Mathematics for Elementary Teachers. Six students were enrolled in the course, three of them being Teacher Corps interns and three being teacher aides. This was the first course of a three course sequence being offered by the instructor. It was followed in Winter 1980 by a second course in Mathematics for Elementary Teachers (202) being offered.

The following model was developed for offering that pilot course. For the initial session of the course, the instructor visited the Lame Deer site. This face-to-face contact at the outset was considered important, especially from the humanizing standpoint. It permitted the instructor to identify each member of the class as an individual, and thereby made subsequent telephone contacts more personal. Following that initial visit, a second visit was made midquarter, and a third visit was made towards the end of the quarter. The remaining seventeen sessions were conducted by telephone from the campus. These instructional sessions were held twice weekly in the late afternoon and were typically of 60 minutes duration each.

A most important dimension of this course was the provision of an on-site tutor, a local mathematics teacher with a master's degree in mathematics. He was contracted to attend each class meeting and to assist with the ongoing instruction as required. In particular, the tutor would illustrate unanticipated problems on the chalkboard and generally provide visual support for the instructor's presentation. Further, he was responsible for providing tutorial help for these students. This would be provided immediately before or immediately after the telephone lecture or at some other time by arrangement. In this role the tutor was also responsible for grading the homework assignments associated with each lecture and for maintaining an informal record of each student's progress in the course. Tests prepared by the instructor were sent to the Lame Deer site and proctored by the tutor, then returned to the instructor for grading.

The presentation of the course followed closely the sequence of selected topics from the text book. The text book presentation was supplemented by handouts and other materials sent to the site prior to the lecture. Lectures were based substantially on these handouts which corresponded to what would have been the instructor's chalkboard presentation in face-to-face situation. The course was divided into a program of 20 lectures, two per week for ten weeks. The regular 25 hours for a 3-credit course was provided for in the review sessions and testing, for which the tutor was responsible.

Articulation between the instructor and tutor was critical. One planning meeting was held prior to the beginning of the course, and regular contact for both planning and feedback was maintained thereafter. Each week, either by phone or in person, the instructor and the tutor discussed the progress of the course and its further direction. Based on tutor feedback the instructor was able to adapt presentation strategies.

It was the responsibility of the Teacher Corps documentor and the Office of Institutional Research to conduct an evaluation of this pilot course. The evaluation was based on the following components: interviews with students and outside observers, written evaluations by students throughout the course, the instructor's progress report, and the documentor's summary. In this report the authors will examine the evaluation of this pilot course, together with the evaluation of the courses offered during Winter quarter.

Evaluation of the Math 201 Course

Student Achievement

At the beginning of the course, each student was to take a math pretest to give the instructor an indication whether the student possessed the prerequisites for success in this course. The pretest, an arithmetic concepts test, was completed by only four of the six students. Of these four, one performed creditably, one satisfactorily, while the other two demonstrated that their mathematical background was weak. This fact automatically creates problems for a valid evaluation of the ETS system in that student difficulties during the course may be related, not to the student's problems with ETS as such, but to his/her own lack of preparation in mathematics. The tutor gave the students as much individual assistance as they requested. Preliminary data suggest the need

for individualizaing the course to accomodate the variability of student backgrounds. This will involve changes in the instructor's role: lectures would need to be kept on audio tape or videotape to be played back when groups of students were ready. The ETS system would then be used, not only for the instructor to make lecture presentations to the students, but also for him/her to answer questions about the lecture material or the homework.

The instructor did attempt to acknowledge individual differences by permitting students to take tests when they felt ready to do so. This meant the instructor could be lecturing on Topic 4 while a student was still reviewing for the Topic 1 test. What was intended as a kindness to the student did not achieve that purpose; because of fears associated with their own lack of preparation for the course, most students procrastinated in taking the tests. At the end of the quarter, only one of the six students had completed all four topic tests. Subsequently, the remaining students have had to complete the requirements for Math 201, a task made more difficult by virtue of their being enrolled in Math 202, the successor to that course. From the data gathered, the authors recommend that each test be completed before the student begins the next unit.

Additional information available to the instructor at the beginning of the course was to have been mathematics anxiety test scores. Unfortunately, this instrument was not available during Fall quarter, and the instructor merely inferred from other contexts that anxiety was high. The instrument was administered in Winter 1980 in conjunction with the Math 202 course, and the results confirmed the instructor's earlier inferences. This information, considered along with the student's weak academic preparedness for the course, suggests that alternative methods of structuring the presentation of such a math course need to be explored. Thus, we believe that Math 201 is sufficiently atypical of courses that can be offered via ETS that judgments about the application of the ETS in eastern Montana cannot be based solely on an evaluation of this course.

At the formative level, students wrote reactions to the course four times during the quarter. These reactions were written on 5 x 8 cards which contained the following open-ended statements:

1. During the last two weeks, the best part of the Math 201 class has been...
2. During the last two weeks, I have had trouble with...

3. I think the Math 201 class could be improved by...

The tutor distributed the cards after every four class sessions. The students completed the cards anonymously, handed them to the tutor who mailed them to the Teacher Corps documentor. The comment cards were then reviewed with the instructor.

Unfortunately, with the number of channels these cards went through, including the mail service, considerable time elapsed before the instructor was able to review these comments, thus, their effect on the instructor's immediate behavior was minimal. Comment cards have been found to be an effective means of providing instructors with informal feedback, thus, some mechanism needs to be developed so that instructors receive this feedback within two to three days of its being written. In other courses when the instructor has used this method of eliciting ongoing feedback, he has been able to respond to student comments immediately and, when necessary, make some revisions in the mode of presentation.

Some sample comments received from students after the first three mailings are recorded below, and these show the importance of immediate feedback to the instructor.

1. During the last two weeks, the best part of the Math 201 class has been:

   (1) "Having the tutor explain on the chalkboard what was given over the phone by the instructor"
   (2) "Challenge of handing in homework consistently"
   (3) "The improved coordination between the tutor and the instructor time allowed for more explanation of topics"

2. During the last two weeks, I have had trouble with:

   (1) "New material to me; need much time to study and do homework. Focusing on voice coming over in contrast to activity going on in room" (tutor writing on board, interjecting, etc.)
   (2) "Terminology: it takes me a long time to do the homework. Studying for the test; still had trouble with some of the things." "Too much 'busy-ness' in the room" (comings and goings, off-task behaviors, etc.)
   (3) "Hearing and focusing when a lot of chatter is going on in room and voice over telephone keeps going on"

3. I think the Math 201 class could be improved by:

   (1) "Having more dead telephone time to let tutor go over concepts, points of interest," etc.
   "Having a review period over previous week's concepts and perhaps fit in here the homework points that we had difficulty with"
   (2) "Better coordination of tutor and instructor responsibilities. Better accoustics and environmental facilities."
   "Having instructor come to class"
   (3) "More people speaking up when they don't understand"
   "Tests not as scattered in time"

It is noticeable that some expressed concerns were not alleviated promptly for the reasons discussed above. The earlier remarks about the lack of preparedness of most of the students are borne out by some difficulties identified by students. More immediate feedback could have led to changes which would have increased student satisfaction with the course.

In addition to the comment cards which they completed periodically, the students were also interviewed twice by the documentor, once in the middle of the quarter and again at the end of the quarter. These interviews focused, in part, on the role of the tutor and some typical student comments follow:

"Tutor helps because reinforcement is quick"

"Tutor is a step ahead and is confusing at times"

"Tutor anticipates and as a result sometimes tends to tell answers. He should slow down"

More of the student comments related to the course instruction:

"Notes and handouts have been helpful"

"Difficult to comprehend without visuals"

"Using telephone makes instruction difficult to pace because student reaction is not seen"

"Good that instructor gives work and signs off to allow practice problems to soak in"

"Instruction should slow down"

On the basis of these student reactions, it is evident that there were growing pains associated with this pilot trial of the ETS system. ETS makes unanticipated demands on both the instructor and students. Adjustments may have to be made in the expections of both instructors and students if this new medium is to be an effective means of instruction.

Observer Reactions

The remaining source of evaluative comment was provided by interviews the documentor held with various observers (college faculty, Teacher Corps staff and other local personnel) who sat in on at least one session during the quarter. These people were asked to comment verbally on their impressions of student participation, understanding and interest, as well as on the effect of ETS as an instructional medium. Sample comments from these interviews follow:

"Instructor must call on non-volunteers to prevent domination by a few individuals"

"Teaching assistant is essential"

"Student/teacher rapport is good"

"Too much material too fast on handout; needs much slower, more detailed step-by-step explanation; don't assume prior knowledge"
"Correction of papers during class by tutor and commentary on mistakes needs to be done"

"Some mathematical concepts are too long and difficult to teach by ETS"

Substantively, these comments reinforce the reactions of the students and suggest strongly that the use of the ETS medium calls for some fundamental changes in teaching-learning styles. Broadly, the reactions of the students and the nonparticipant observers focus on good instructional style, with particular reference to learners who may experience difficulty with the subject matter. The added variable of a new instructional medium created a dimension that was not readily accomodated at this time.

Evaluation Summary

As a pilot trial to only six students, most of whom were ill-prepared to undertake Math 201, this tryout of the ETS medium did point up some findings that would be helpful in the further use of ETS.

It is evident that ETS involves a major shift in learning style for the students. From an emphasis on the visual, there is a shift to the primarily aural, and this has significant implications for instructor preparation. The instructor found that the preparation and organization of materials for this class required much more time and effort than it did for corresponding courses taught on a face-to-face basis.

The student comments suggest that the most serious problem facing the successful implementation of ETS is the creation of a facilitative learning environment. From the humanizing standpoint, the students' perception of the instructor's attitude is critical to their morale. The instructor's site visits were important in this regard as was his emphasis on criterion-referenced rather than norm-referenced achievement.

Clearly, if ETS is to be used successfully, the above considerations must be built into the planning and execution of ETS course development. For a class similar to mathematics, an on-site tutor is almost essential so that unanticipated problems needing visual treatment can be dealt with. The handouts (lecture outlines) were well received, but the instructor became aware of ways of improving them if his course were to be presented again via ETS. Also, instead of including important visual support material in the single-colored handouts, it would be advantageous if wall charts or overhead projector transparencies were prepared. Finally, the instructor must make a very deliberate effort to involve all class members in the lesson: when eye contact is lacking, it is easy to ignore a non-participant who cannot be seen.

Evaluation of ETS During Winter 1980

Four courses using ETS were taught during Winter quarter demonstrating three significantly different ETS models. Math 202, the second course in Math for Elementary Teachers was taught using the same model that had been used in the Fall quarter. Two other courses, Educ 492 Improvement in Elementary Art and Educ 592 Improvement of Instruction in Elementary Social Studies, were taught using the model of face-to-face instruction one week and ETS the next. In this way students received half of the instruction with the instructor on site, and the other half over the telephone. The fourth course, Educ 562 Curriculum Foundations and Construction, was taught simultaneously to two groups of students, one in Billings and one in Lame Deer. The instructor conducted class sessions from both sites.

Students enrolled in these four courses were asked to evaluate them for effectiveness of the ETS method of instruction at the end of the Winter Quarter. Five mathematics students filled out the instrument, three of whom were receiving ETS instruction in at least one other course. They were evenly divided on the relative effectiveness of half ETS, half face-to-face instruction and teaching by ETS with an on-site tutor. The ten curriculum students had no exposure to any other ETS model and thus had no basis for comparison; while a majority of the twenty who responded from Art and Social Studies, fourteen of whom were teachers, expressed a preference for the half ETS, half face-to-face instruction model.

When asked what other ETS models might prove effective, students showed that they were not really aware of alternative models, although several suggested that the use of video might be effective combined with ETS usage. While there was no question of their preferring ETS to face-to-face instruction, students acknowledged that ETS did provide a means of supplying instruction to remote areas, that more classes should be made available on this basis, and that students in remote locations would then have greater opportunity to share their ideas with those in other places.

In evaluating the ETS system, the advantages mentioned above are offset by a number of weaknesses identified by the students. The most serious of these is the lack of personal contact, the need to be able to see the instructor and students at other locations. This problem points up the need for humanizing procedures which include involving all students in the interaction. One suggestion made was for each site to have photographs of all other students so that a visual image could be formed when an identified individual was speaking. The other problem with implications for the instructor is the lack of concentration and incidence of off-task behavior by some students. A number of students identified mechanical problems, such as fade-out and static, that affected their learning, but most students felt that while some improvement is needed, the effect on the learning environment was not significant.

To help overcome these problems, students suggested that instructors should receive training specifically for delivery of ETS courses, and that there be increased opportunities for student interaction. In courses where face-to-face contact with the instructor is less frequent, students indicated that they would value the opportunity for private conferences with the instructor either before or after the telephone instructional session. Students agreed on the

importance of supplementary materials to support the ETS instruction. Lecture handouts or specially prepared texts for ETS use were considered vital. In addition, overhead projector transparencies, color slides, and charts were seen as important instructional aids. Videotaping of some lectures were considered a potential alternative method of communication.

In terms of evaluating ETS, students expressed a preference for providing feedback twice in one quarter: once about half-way through the course, and again at the end of the course. They were evenly divided as to whether this feedback should be written or oral, suggesting that there is a place for both forms. Overall, the student reaction to instruction via ETS was positive, a significant majority indicated that they would attend future ETS classes.

Summary

Given the problems of delivering inservice education to geographically remote areas, it has become critical that alternative delivery systems be found. For example, in terms of today's energy costs, the provision of inservice education could become financially prohibitive. The use of ETS was considered largely because it would cut down the need for travel to these remote locations.

The pilot trial of Math 201 via ETS in Fall 1979 pointed up expected problems in ETS delivery. The use of three different models of ETS instruction for the delivery of four courses in Winter 1980 gave students the opportunity to evaluate the effectiveness of ETS instruction, including the use of alternative approaches. Evaluations of pilot course offerings indicated that ETS can be used effectively, particularly if the student suggestions for improvement are realized in subsequent course offerings. Four of the courses to be offered by Teachers Corps to the Lame Deer site in Spring 1980 will include ETS components. As instructors acquire greater skill in teaching via ETS, and students become more accepting of the physical limitations of this delivery system, the authors expect an increasing proportion of Eastern Montana College's off-campus offerings to make use of this medium.

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REDEFINING THE PROFESSIONAL ROLE MODEL

by

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May 1980

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INTRODUCTION

Professional renewal, as the term is used in this paper, means doing what one must do to maintain and/or improve one's teaching competence. Professional renewal occurs following the initial, preservice education while one is an employed teacher.

All states require teachers to meet certain specific requirements before the teacher is certified or licensed to teach in public schools. Provision for teacher certification is generally established by authority of the state's legislature, while specific requirements are identified and administered by a state education agency. At one time, teachers who met certain state requirements received a "life certificate" which authorized or licensed that person to teach "for life" without requiring that additional professional training be taken or completed. However, within the last half-century, states have modified their certification requirements to provide that teachers must "renew" their certificates at specified times. With few exceptions, and the majority of these exceptions have been in recent years, renewal of one's teaching certificate could be accomplished by successfully completing, within a specified time, a certain number of credit hours on the campus of a university. While some states specified certain courses or kinds of courses, most states permitted the teacher broad individual latitude with respect to the courses he or she could submit to meet the re-certification requirements. A few states, particularly within the last decade, have permitted teachers to meet re-certification requirements through activities other than course work; such activities have included travel, study for advanced degree, curriculum development and research.

Many teacher education programs leading to certification at the undergraduate level assume, in requiring all prospective teachers to take the same courses, that all need the same, or nearly the same, professional training. Programs operating under this assumption and practice generally consist of courses in subject matter disciplines and some so-called methods or professional courses in which the prospective teacher learns "how to teach." Re-certification or professional renewal has, for the most part, meant doing more of the same, but at the graduate level.

PURPOSE

While this type of renewal has been effective in helping teachers improve their professional competence, perhaps other certification and renewal models should be examined. The purpose of this paper is to present a model that has been found effective, in assisting teachers, school districts, and institutions of higher education to increase the quality of professional renewal experiences and in focusing the efforts of the teacher upon the acquisition and development of teaching skills and services at professional levels of delivery.

Elements of a Professional Renewal Model

should contain the following features:

First, the professional renewal model should recognize the learner needs of students. That is, the model must identify what it is that the teacher is to effect, and what student needs the teacher can reasonably be expected to satisfy.

Second, the professional renewal model should describe specific action(s) of the teacher which are designed and used to satisfy the learner needs of the student. That is, the model must focus the teaching skill of the teacher upon the learner needs of the student.

Third, the professional renewal model should diagnose the teaching skills of the teacher. That is, by using the model, teachers must be able to identify teaching skills he or she has acquired and the level, or quality, with which those skills are applied.

Fourth, the professional renewal model should enable teachers to put into priority his or her needs for teaching skills. That is, the model must identify appropriate goals that are realistic under the particular circumstances and provide assistance for identifying the order of importance in which their needs must be met.

Fifth, professional renewal models should identify alternatives for the teacher in his or her acquisitions/development/utilization of the priority teaching skills. That is, the model must give choices to teachers in the processes of professional renewal.

Sixth, the professional renewal model should enable teachers to demonstrate/prove/verify his or her teaching competence. That is, the model must allow and provide continuous personal and professional growth.

These six components of a professional renewal model operate in harmony with principles of human growth and development and are based upon generally accepted principles of teaching-learning.

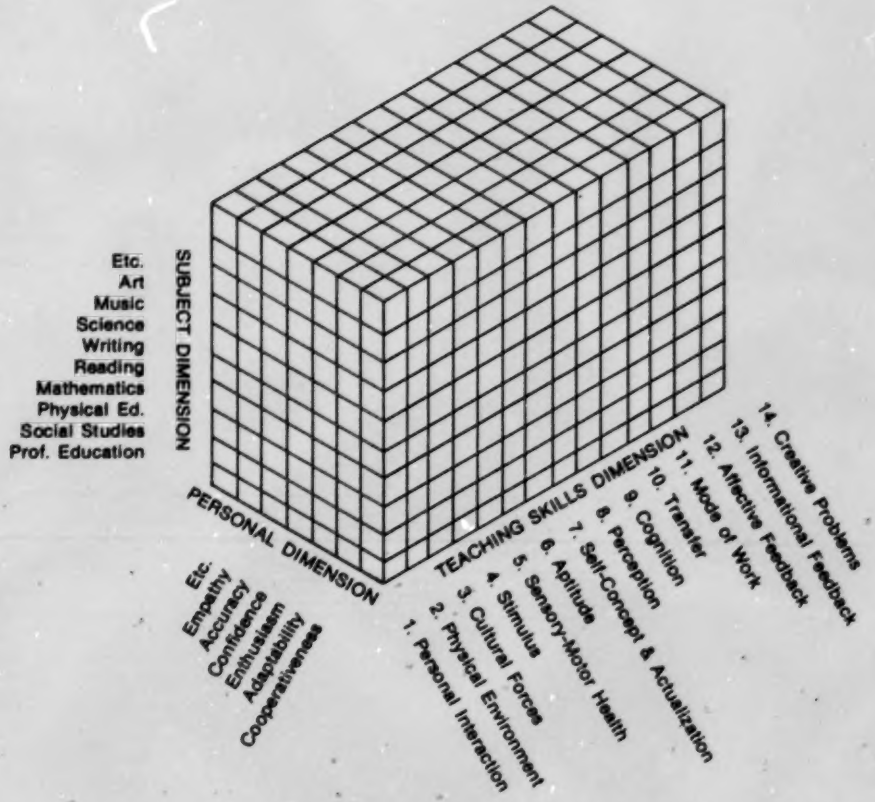
Dimensions of the Professional Teacher

The professional renewal model described in this paper considers three major dimensions or areas in which the teacher should be able to demonstrate competence: subject matter, personal, and teaching skills. "Subject matter" is concerned with teachers' knowledge, understanding, and ability to use the content or facts, principles, and processes of disciplines such as language, mathematics, music and so forth. "Personal" is concerned with each teacher's personal, human qualities or attributes which enable them to develop a positive self-concept and, in general, to assume appropriate roles in various human interactions. Qualities of empathy, responsibility, and dependability are specific examples of "personal" characteristics. "Teaching skills" are concerned with the teacher's ability to identify, plan, structure, direct, and evaluate learning activities for and with students. It is the teacher's expertise in teaching skills that separates him or her from other educated, trained, cultured, mature persons and distinguishes or identifies one as a professional teacher.

THREE DIMENSIONS OF A PROFESSIONAL TEACHER

The Utah Collaborative Teacher Corps Project views professional teachers in three dimensions as illustrated in the following:

basic learner needs that are consistant in learning situations. A team of professors representing four major teacher training institutions in the State of Utah, in cooperation with the Utah State Office of Education and Teacher Corps have identified over seventy teaching skills that are required to meet these basic learner needs. The basic learner needs have been arranged into five clusters and are indicated in the following figure taken from The Utah State Office of Education publication Teaching Skills - A Dimension of Professional Competence.

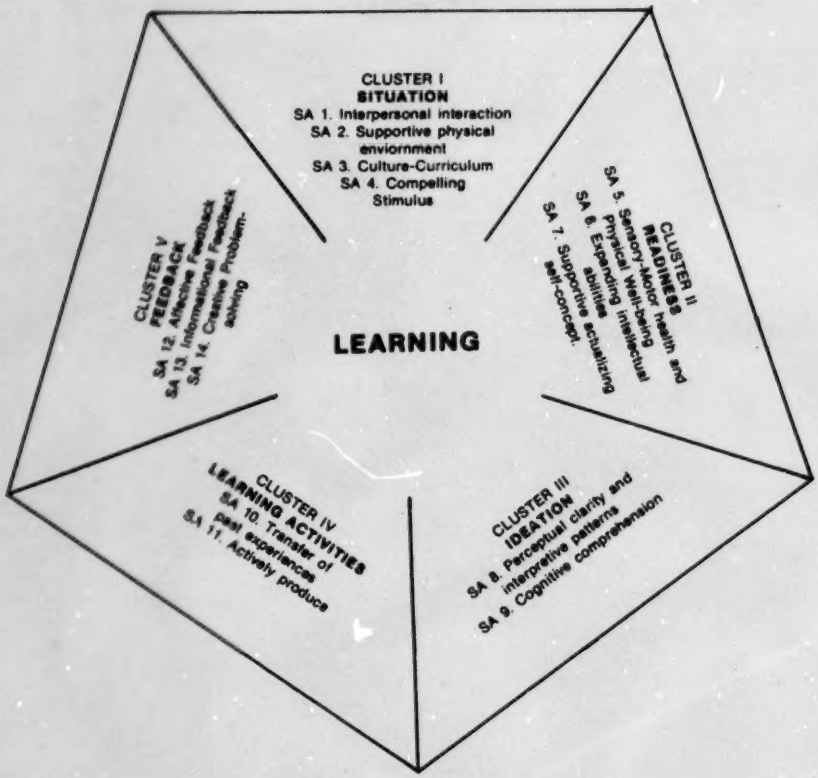


Professional Skills Dimension

For many years critics and friends of education have questioned if there really is a body of professional knowledge. Many teacher training programs have consisted of the teaching of subject matter and the sharing of teaching ideas. Most teachers-in-training in the past have indicated that the most beneficial part of their training was student teaching where they were able to see a teacher in action and model their behavior.

Dr. David Stone, Professor of Educational Psychology at Utah State University, has been doing research on the learning process for over twenty five years. Through this research he has identified fourteen

Teaching Skills in Clusters Around a Learner



This figure is a schemata which represents the five clusters of teaching skills and their fourteen teaching skill areas (SA) as a complete "Circle of Teaching Skills) designed to meet learner needs. This simplified "Circle of Teaching Skills", shows that these five clusters revolve around a learner. The situation provides lesson input. If the learner is ready, the thinking or ideation takes place. A trial can occur in which the learner shows what he/she can do. This is followed by feedback in which rewards and evaluation result in further creative problem-solving.

In Cluster One, "The Situation," under the learner need for "interpersonal interaction," the teaching skills are:

SA 1.1 Promotion of Group Acceptance of each person.

SA 1.2 Formation and Utilization of Work Groups

SA 1.3 Measurement of Student Relationships

SA 1.4 Utilization of Group Dynamics

SA 1.5 Interaction with Parents and Community

SA 1.6 Cooperation with Colleagues

In the Professional Renewal Model, different levels of professional competence are recognized, within a basic code of teaching skills. In the same manner as above, each learner need has been matched with its appropriate teaching skill requirement.

Levels of Professional Competence

Professional competence refers to the skill and capability of a teacher to direct students' learning. A teacher may demonstrate professional competence at one or more taxonomic levels. These levels are:

LEVEL 1 (Understanding)

The teacher demonstrates

(1) understanding of basic concepts

by reporting a personal observation of a professional teacher using the particular skill. The report shall contain appropriate concepts (professional terminology and vocabulary) to identify, define, and describe the situation and the interaction between/among teacher and learner(s).

LEVEL II (Understanding + Planning)

The teacher demonstrates an

(1) understanding of basic concepts

(2) ability to utilize basic concepts to develop instructional plans by

developing instructional (lesson) plans or other plans for implementing skills. These plans shall be based upon the teacher's personal experience, reading, discussion with others, and/or special training to meet a specific need of learners.

LEVEL III (Understanding + Planning + Implementation)

The teacher demonstrates an

(1) understanding of basic concepts

(2) ability to utilize basic concepts to develop instructional plans by

the specific skill in a teaching-learning situation. The implementation shall be considered effective if learners' attitudes are changed or if learners acquire information or if learners acquire or develop a skill.

LEVEL IV (Understanding + Planning + Implementing + Adapting)

The teacher demonstrates an/a

(1) understanding of basic concepts

(2) ability to utilize basic principles to develop instruction plans

(3) professional skill in implementing principles and instructional plans

(4) ability to adapt the implementation of the specific skill in a variety of circumstances, situations and conditions

The adapting shall be appropriate to meet needs and abilities of the learner(s).

LEVEL V (Understanding + Planning + Implementing + Adapting + Internalizing)

The teacher demonstrates an/a

(1) understanding of basic concepts

(2) ability to utilize basic principles to develop instructional plans

(3) professional skill in implementing principles and instructional plans

(4) ability to adapt the implementation of the specific skill in a variety of circumstances, situations and conditions

(5) utilization of the specific skill has been synthesized over an extended period of time

This model is designed to be used as a self-diagnostic instrument and is useful to teachers in determining inservice needs.

Curriculum Management - Subject Area Dimension

When teachers were trained by sharing the experiences of the past generation with the new trainees it was very important that specialists in the subject disciplines develop books to serve as the guide for instruction. Much of the management of curriculum subjects was built into their "Teacher Editions". Both the scope and sequence of a subject were carefully packaged with instructions to the teacher on how to proceed. Under the "Textbook Centered Program" the same information was generally given to all of the students in the same amount of time. Students who couldn't keep up with their peers were given poor grades and "sifted out". When the nation's technology was less mechanized, the labor force could absorb these unskilled youths and thus, the system served society very well.

Today our society has no way to absorb those "sifted out", therefore, professional educators are working to meet the needs of all students. With teacher educators focusing more and more on specific professional and subject area skills it is vital that teachers be given a new method for managing the curriculum. It is evident that the scope of the curriculum must be identified first. From state guides, district curriculum guides, textbooks, and many other sources, what is to be taught is determined. These statements start out with broad national, state, and district goals and end with specific learning objectives for each subject area.

In the "Goal-based Educational Management System" developed by the Jordan School District and modified by The Utah Collaborative Teacher Corps Project, the subject content is first broken down into broad areas called "strands." For reading the strands are:

Strand 1 Phonics - the sounds of letters and words

Strand 2 Structure - form, shape, and parts of words

Strand 3 Vocabulary - the meaning of words and word parts

Strand 4 Comprehension - the meaning and implications of the content and printed page

Strand 5 Study Skills - the application of all the reading skills and processes of reading

Strand 6 Affective Reading - the value and enjoyment to be gained as a result of reading

Each strand is then broken into goal units. The course goals are summary statements which group related specific outcomes into teaching units. A sample course goal selected from the fifth grade phonics strand is:

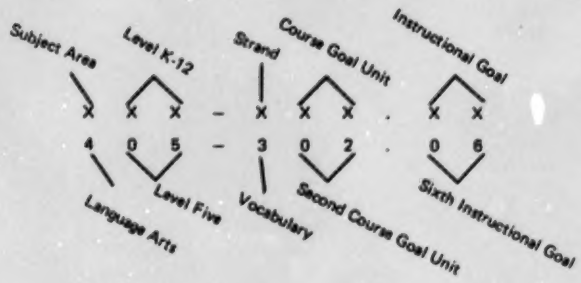
The student is able to determine the pronunciation of words by identifying regular, irregular, and silent consonants, two and three letter consonant blends, consonant diagraphs, and the sounds they represent.

The course goals, stated above, are then broken into instructional goals.

A sample under the course goal listed above is:

> The student is able to identify by sight, sound and name the initial, medial and final single regular consonant blends.

To support such a matrix, a coding number system has been developed and used in an instructional management file. This number system can be used in all subject areas. It is as follows:



Because teachers are now focusing on specific skills, a backup file of different teaching activities can be developed to help teach each skill. The basic scope of the subject area can be coded to adopted textbooks if districts require the use of a text. When new textbooks are adopted it doesn't force the teacher to learn a new program.

If students are learning at different rates, a system to keep track of progress must be used. Such retrieval systems may be simple or complex. A sample grid listing the student's name on one side of the strands, course units and instructional goals on the other side would suffice. It could look like the following:

	Strand I	Strand II	Strand III	Strand IV
	405-101-01 / 405-101-02 / 405-101-03	405-201-01 / 405-201-02 / 405-201-03	405-301-01 / 405-301-02 / 405-301-03	405-401-01 / 405-401-02 / 405-401-03
Jane Doe				
John Doe				
Mary Smith				
Peter Jones				

Such a system allows the teacher to make professional judgements based on the needs of students and allows accomodation for varying learning styles and rates. Special pre- and post-tests are developed to help with the evaluation process. A placement test is given to determine where a student should begin his or her work.

At teacher training institutions we can now focus on the specifics needed by the professional to be successful in curriculum management and usage, making teacher training much more relevant.

The Personal Dimension

When asked to describe a good teacher, lay people and many educators start with "warm, friendly, enthusiastic, likes kids," and other such statements. Without question, one of the most important areas of professionalism, yet hardest to define, is the personal dimension. Many teachers with "great personalities" have been classified as "born teachers" because of the power of this dimension.

While only in the very beginning stages, the Utah Collaborative Teacher Corps Project is attempting to define the elements of this dimension and to develop ways to influence the behavior of teachers. With current advances in the social science areas, we hope to soon have programs to define, analyze and change behavior more realistically.

This dimension of the professional teacher, when it is better defined, holds great promise in raising the standards of the total profession and of education as a whole.

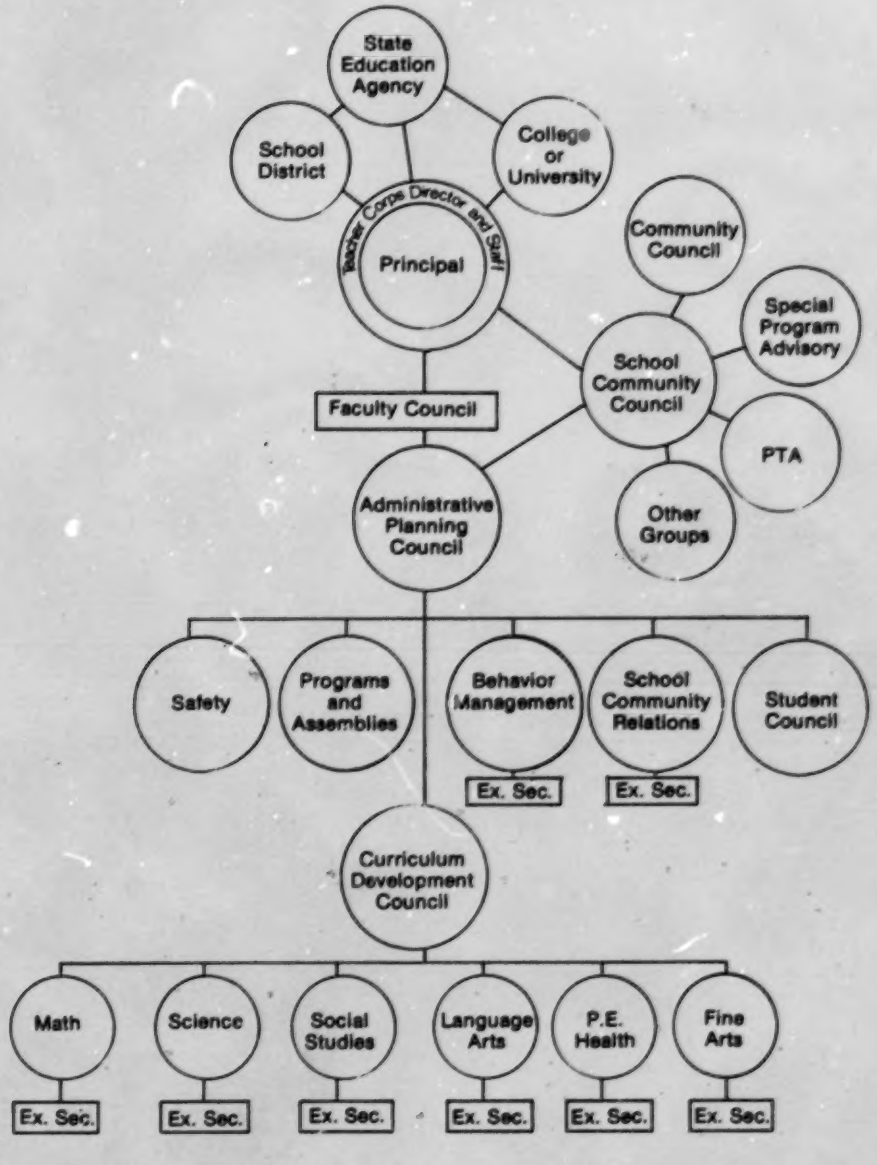
MODEL FOR SHARED INSERVICE AND ADMINISTRATION

While the model describing the three dimensions of a professional teacher has great promise at both the preservice and inservice levels, a different way for faculty members to address the setting in which they work is vitally needed.

As the education profession has matured and all role groups have better defined their needed competencies, a growing dissatisfaction has occured with the isolation of the various roles. Teachers, particularly, have desired an active part in the processes of administration. The past notion of a "principal teacher" suggested one who was much better educated and thus was able to assist the "less" educated in their teaching function. This rational is not valid in most educational settings today. The need is for an educational leader who is able to facilitate the educational process involving a highly educated staff in planning.

The Teacher Corps Staff and Dee Elementary School Faculty in the Utah Collaborative Teacher Corps Project have developed and implemented a "Model for Shared Administration and Inservice" composed of five levels, or areas of responsibility. The model follows:

A MODEL FOR SHARED ADMINISTRATION AND INSERVICE



Teacher Corps
Weber State College
Utah State University
Ogden City Schools

The first level responds to "The State Education Agency", as the statutory responsibility rests with that body. It is realized that the philosophy of a given school must be tied to the laws, policies and regulations of the state education agency. All authority exercised at other levels in this model is derived from and vested in Level I.

The second level of responsibility is "The School District." In the Utah Collaborative Project, the Ogden City School District, represented by the Board of Education, the superintendent, and the administrative team are primarily responsible. The school district personnel working in accordance with state laws and state education policies determine local programs designed for quality education in the district.

The college and university also function at this level. The institutions of higher education are the training arm and train teachers following state education agency certification standards. They also work closely with the district and school administration to provide relevant inservice training.

The third level in the model is "The School." The principal has prime responsibility for the school at this level. Deriving his/her authority from Levels I and II, the principal is responsible to follow the laws and policies of the above levels and to transpose them into an educational program for each child. Because of this heavy responsibility many principals reserve the administrative decision making of the school to themselves. Many other forward-looking principals believe that people will be more committed to programs into which they have input. Although the principal in the school where this model was developed shares his decision-making authority with the faculty, he must legally maintain a veto power over all actions of Levels IV, V and VI.

The fourth level of responsibility is "The Faculty Council" composed of all members of the school faculty. The principal is the presiding officer of the Council. The Faculty Council acts as a group to ratify all actions of the Administrative Planning Council and other committees. When committees have recommendations that are ready to become school policy they must finally be accepted by the Faculty Council.

The fifth level of the model is an "Administrative Planning Council (APC)." It is composed of (1) team leaders from each pod, (2) resource teacher representatives, (3) Teacher Corps team leader, and (4) the media specialist. The principal works directly as the executive secretary of this group.

Responsibilities of the Administrative Planning Council include: (1) advising the principal, (2) directing the activities of sub-committees appointed by the Council, (3) defining the responsibilities of the Curriculum Development Council, (4) selecting, developing and/or recommending curricular goals, (5) planning professional inservice programs and activities, and (6) such other duties as may be assigned by the Faculty Council.

Each of the pod leaders on the Administrative Planning Council serve as chairperson of an administrative committee.

The following are present administrative committees: (1) Safety, (2) Behavior Management, (3) School-Community Relations, (4) Programs and Assemblies, (5) Student Council. The faculty all serve on an administrative committee as well as a curriculum committee mentioned at a later level.

The sixth level, the "Curriculum Development Council (CDC)" is designed to focus the attention of the faculty on each curricular area and to have a group that is responsible for continuously upgrading each content area. (The Utah Collaborative Teacher Corps Project CDC was formed by the principal appointing each committee after the group had expressed its first and second preference. Each committee then elected a chairperson.) The CDC is composed of the chairpersons of each of the following committees: (1) Math, (2) Science, (3) Social Studies, (4) Language Arts, (5) P.E. and Health, and (6) Fine Arts. The council also has an executive secretary and the principal serves as an ex officio member.

Responsibilities of the Curriculum Development Council include: (1) construction, implementation, evaluation and modification of the curricular programs of the school, (2) selection and utilization of instructional materials and other media, and (3) implementation of retrieval systems.

One of the major problems facing any faculty wanting to be involved in the administration and curriculum development of a school is the heavy demand on a teacher's time. To alleviate this condition, executive secretaries have been selected and appointed. An executive secretary is a specialist in the field considered. This person could be a specialist from the college, or a specialist from the district or staff, who might have time to function in this capacity. The executive secretary's major function is to do the leg work for the committees. The executive secretary outlines goals, defines objectives, and suggests programs. Only when the committee is satisfied does it become the committee recommended program. The committee then recommends the program to the Curriculum Development Council who correlates all curriculum areas. If the CDC approves, the program is then presented to the Administrative Planning Council and finally to the Faculty Council. Only when the faculty is satisfied does it become a school program.

One of the great strengths of the executive secretary concept in this setting is the bridging of the proverbial gap between theory and practice. The executive secretary brings to the project the advantage of a specialist. The latest methods, research, and practice are all areas at his/her grasp. All of this theory, which is necessary to keep the profession alive and growing, is then reality-tested by professionals who can weigh theories against the practicalities of daily teaching. The model provides a potential for eventually tying the training of teachers at the preservice level, and retraining at the inservice level, directly to classroom practice.

The model is not intended to be a final answer to education's problems, but is viewed rather as a working model. Each level is receiving careful evaluation as it is put into practice and will be continuously evaluated as more evidence is collected.

This much we do know now: by using the model, the Dee School Faculty has made great strides toward meet-

ing the needs of their children, of feeling more like they are contributing toward their profession, and feeling better about themselves as persons.

Summary

This paper has addressed some facets of professional renewal faced by the Utah Collaborative Project. In summary,

(1) It is our opinion that the current practice of teacher re-certification as a means of professional renewal should be evaluated.

(2) It is proposed that a professional renewal model should be developed and utilized to increase teaching competence.

(3) Six elements which the writers believe should be the basis of a professional renewal model have been identified. These elements, which also became criteria to judge the model, are:

1 - Recognition of learner needs of students

2 - Description of teaching skills

3 - Diagnosis of teaching skills

4 - Priority setting/goal setting of teacher needs

5 - Process alternatives

6 - Demonstration of teacher competence

(4) Three dimensions of the professional teacher have been described. These are:

1 - Subject Matter

2 - Personal

3 - Teaching Skills

(5) A professional renewal model and program based upon these six elements and the three dimensions as developed by the Utah Collaborative Project have been described.

As a result of our experience, it is our opinion that the profession, the local education agency (LEA), state education agency (SEA), and institutions of higher education (IHE) can increase the effectiveness of professional renewal and thereby, improve the quality of educational opportunity and of professional services provided to public school students, by deliberately designing and implementing a professional renewal model which focuses teacher effort upon the acquisition and/or improvement of subject matter, personal qualities, and teaching skills.

The subject dimension, using a goal-based mastery system, has great promise for the profession. The teaching skills dimension, as it is refined, will continue to help us focus on the needs of professionals.

by teachers), is perhaps the most exciting as well as the most challenging! Much of the literature addressing quality education discusses professional qualities. Selection Research, Inc., out of Lincoln, Nebraska, has done extensive work in measuring these qualities. Other groups have conducted research to identify what these attributes are. There is a great need to further identify these key personal traits, but most importantly to find out how to influence their development. As we move further into this dimension, a whole new realm of professionalism will be opened.

28

EIGHTIES PREPARATION: KNOWLEDGE ABOUT MULTICULTURAL EDUCATION TO PROMOTE SCHOOLING

by

RICHARD HOVEY

Black Hills State College
Spearfish, South Dakota

May 1980

Linda Roth

Linda Roth

Multicultural education is one of the current ideas discussed and advocated as a necessary educational practice. Like many ideas, the substance and processes are multiple due to the perspectives of different supporters. For some, multicultural education is an affective exercise in sensitivity and awareness. For others, it is an economic extension of affirmative action or equal opportunity employment. While both of these may be legitimate aspirations because of social, economic and political arrangements, a third perspective is necessary. This perspective involves the concept of culture and the resulting cultural differences in behavior because of different cultural patterns. "Simply talking about 'cultural differences' and how we must respect them is a hollow cliche."[1] I think it is time for educators to give some serious examination to cultural differences. In 1971, Henry Berger identified a number of variables that, due to different cultural content, result in different behavior.[2] He recognized that these variables should constitute any study of education in multicultural settings. These variables included: 1) domains of cognition vs. affect vs. psychomotor, 2) communication, (3) timing, 4) space, 5) social organization, 6) ethics, and 7) causality.

The current hue for multiculturalism does key on the assumption that nations and communities have the potential for the presence of more than one cultural entity. The usual pattern that follows is a concern for cultural identity and the resultant affective stresses and strains that occur because of acculturative and assimilative processes. Various theorists and researchers have shown the value of emotional health and stability for intellectual functioning; however, I would like to focus on another aspect of cultural differences that seems to me overlooked or simply passed by. This is the impact of a culture on the cognitive skills and cognitive processing of individuals within that culture. To cover at least enough information to provide a springboard for response and further discussion, my presentation will introduce the field of culture and cognition; it will elaborate on one of the most comprehensive paradigms of the field - Herman Witkin's concept of psychological differentiation - and it will indicate implications of the above for the education process particularly in societies that are heterogeneous in cultural population.

Culture and Cognition

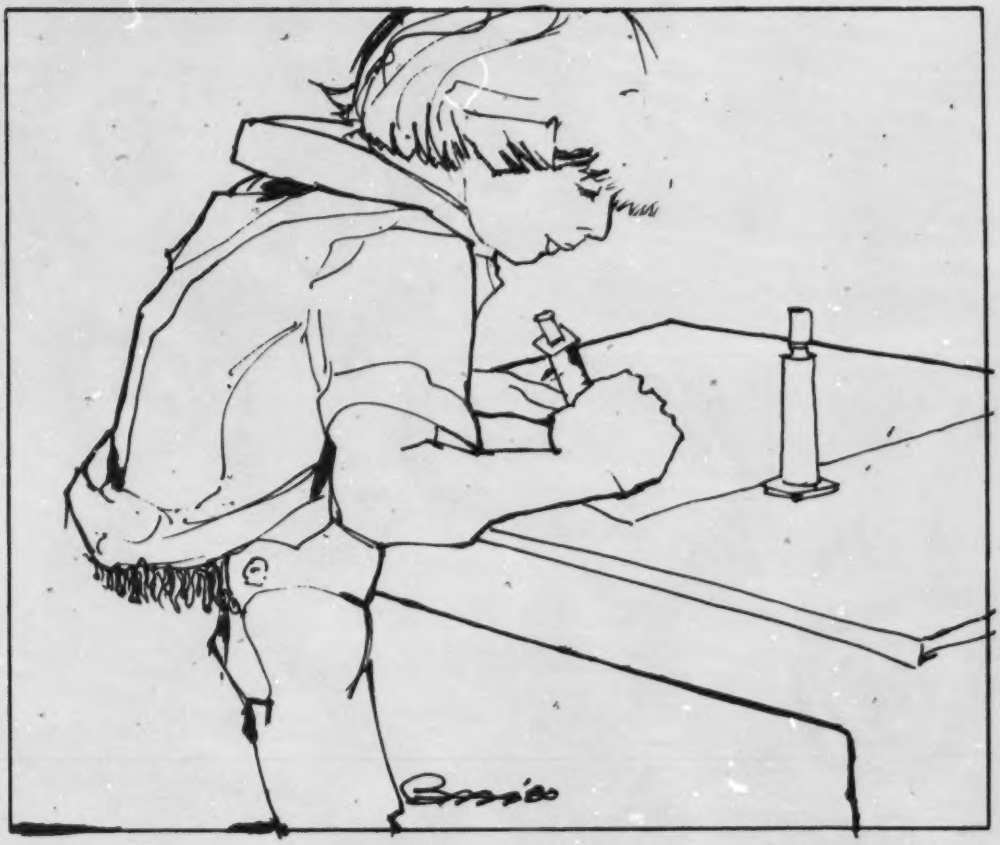
The field of culture and cognition is a hybrid resulting from the borrowing and blending of several different orientations. The investigators and theorists in this field usually begin with either a psychology or an anthropology background.

From the discipline of psychology comes the viewpoint of men and knowledge subsumed under the study of cognition. Cognitive psychology is a general rubric that encompasses several distinctly differing viewpoints. Essentially, however, cognition means "...the way human beings perceive and learn, how they reason and think, even how they remember and imagine; and how their 'minds' work in the ordinary day to day activities of life."[3]

Cognition focuses on the information and the meaning given to or conveyed by stimulus input. Thus, questions of acquiring and processing information are concerns of cognition. It was thought early in the development of the field that environmental inputs were/are important to cognitive development. Kurt Lewin's work typifies much of the orientation in this field of inquiry. Lewin's work has centered on a relativistic view of men and the learning process.[4] Since he incorporates both a cognitive theory of how people gain an understanding of themselves and their environment with field theory, which centers on the idea that all psychological activities of a person occur in a field, his theory is often called a cognitive-field theory of learning. Lewin visualizes the individual as surrounded by a life space with which he is constantly interacting in order to formulate goals and modes of activity.

The life space is a psychological world made up not of physical entities but of functional relationships. The individual is a self that emerges from the social living of an organism, and continues to change throughout life. There is a continual expansion of the life space of an individual as he encounters new situations that extend his world of understanding. Thus, it can be said "through his interactive process each person acquires such achievements as language, conceptual thinking and moral, social and religious predispositions and insights."[5] An understanding of the development of an individual must then require some knowledge of the individual's surroundings - physical, mental and emotional.

From anthropology comes the concept of culture. When E.B. Taylor first defined culture as the "complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits acquired by man as a member of society,"[6] he laid the foundation for a "theory of culture patterns." This theory has been formulated predominately and most succinctly by A. L. Kroeber and Clyde Kluckhorn.[7] They recognized that in anthropological terms culture is not an entity but rather an abstraction based on the observed phenomena of human behavior. It was noted that variations in behavior between members of different cultures didn't occur capriciously or at random; rather the observed behavior of men "varies within a finite range of what is known at a specific time and place and newly introduced features are modified to fit what already is current to the local society."[8] Each culture consists of an integrated whole that forms a pattern of behavior. Each man, though he has the power to act as an individual, is in fact limited in his course of action by the cultural resources available. His actions are drawn upon the cultural pattern of his society. Thus, as Kluckhorn states "It is as if the basic pattern of the culture must be reflected in the internal structure of each individual person: as if the individual were in some sense a microcosm and the culture to which he belongs a macrocosm."[9] Since cultures can consist of units such as technology, ideology, economic, political and social structure, the content of each culture can have numerous variations and it is concurrently possible to get many cultures with varying degrees of unit similarity. Such a variety of environmental inputs may coexist as to produce different behavioral patterns, cognitive skills and mental processes simultaneously in contemporary persons. Thus, individuals may "bear conceptually the characteristics of the regions of culture in which they find themselves."[10]



By use of the two concepts - "cognition" from psychology and "culture" from anthropology - various aspects of cognitive development such as learning, problem-solving, concept attainment, reasoning, attention and psycholinguistics have been, and are being, investigated. The focus of such studies is generally on changes and constancies as the individual grows and the impact of social and cultural forces on the development process.

Witkin's Paradigm

Probably one of the most comprehensive and most investigated paradigms in the field of culture and cognition is Herman Witkin's work on psychological differentiation.[11] I will elaborate on this model as illustrative of cultural differences and will explain how those differences can act as inputs for educational practice.

Lewin, in his cognitive-field theory, postulated that development of the personality and life spaces involved the process of differentiation. Witkin's work starts with this idea and develops it further. Witkin thinks of the beginning of an individual as an amorphous continuous mass. Eventually an awareness develops of a difference between an inner and an outer existence within the original body and a proximate field matrix. As the individual ages increasing differentiation occurs. There is an awareness of the various parts of the body and their interrelatedness. Finally, the awareness of a separateness from the mother and other close humans grows until the organism becomes an individual. Witkin's work developed from an interest in the area of perception. Very early in his work he found that people differ in rather general ways from each other in their mode of perceiving. Through the use of several tests he postulated two poles on a continuum of behavior; he labeled the poles "field dependence" and "field independence." Field dependent behavior is characterized by the individual's orienting himself through the overall organization of the field or area at which he is looking. No items in the field stand out as distinct, but rather all parts are fused to make a whole. In field independence, orientation is achieved by experiencing parts of the field as discrete items which provide direction. Individuals preferred patterns in perceptual behavior, Witkin called perceptual styles. Eventually Witkin began to explore the possibility of linkage of perceptual styles with other personality and intellectual activities. He states that "It became clear that the way in which each person orients himself in space is an expression of a more general mode of perceiving which is linked to a broad and varied

array of personal characteristics involving a great many areas of psychological functioning."[12]

A rough descriptive capsule for individuals of the two polar extremes of the continuum emerged after a number of studies by Witkin and others. Generally people who are found to be field dependent tend to be more socially directed or people oriented. Their choices of action seem to be highly influenced by what others around them say. An extension of this orientation is that field-dependent people are more conforming to the expectations of others and to social norms and status achieving patterns. In terms of the development of information networks for the organization and retrieval of knowledge, the field-dependent person seems to need structures presented from the outside rather than developing his/her own. In problem-solving, field-dependent individuals have difficulties where the isolation and extraction of important information from an embedded context are needed. Lastly, in the acquisition of new knowledge it appears that field-dependent persons are more likely to be concrete learners. They use many senses for stimulus input, plus the opportunity to do a task rather than just to read or hear about it. In learning behavior, the field-dependent are concrete, preferring conforming, other-directed, socially oriented, diffuse in structure and organization and poor isolators of elements from a field; contrastingly, field-independent persons are capable of abstract or few-sense learning, less conforming, more self-directed, individualistic, structured in terms of information-networks and capable of isolating elements from a field in problem-solving.

After the realization that such patterning or general modes of beha were developed in individuals and that these modes were consistent over much of an individual's behavior for long periods of time (years), Witkin and others attempted to find molding agents or forces for them. They were able to identify what is called a "socialization cluster". There were three critical general relationship categories within the socialization cluster. A fourth category called "environmental interaction" was also mentioned by Witkin as influential in the development of self-identify. The four categories are as follows: 1) mother-child interaction, 2) development by socialization of the child's control over expressions of impulse, 3) personal characteristics of the mother, and 4) nature ecology.

As other investigators began to explore Witkin's work and try it out in groups with different social structure or cultural milieus, it became apparent that the presence of structural units with specific content might cause members of a social class and/or cultural subgroup to be basically similar in their amount of differentiation. Dershowitz demonstrated that cultural patterns in the Jewish subculture of the United States influenced the psychological differentiation of the children.[13] From this study it was demonstrated that a consistent pattern of responses was elicited over tasks related to field-dependence in the Jewish community due to the attitudes, values and child-rearing practices of the community. The greater the exposure of the child to traditional Jewish behavioral patterns, the higher the degree of field dependence.

Since the beginnings by Dershowitz, other investigators have demonstrated a relationship of culture to psychological differentation.[14] Among the other culture groups investigated have been Eskimos, Mexicans, Ghanians, Fijians, Chinese, Australian aborigines, and Israelis. The cumulative results of these studies, have provided support to factors considered by Witkin to promote a particular dimension of differentiation that occurs.[15] There is the socialization cluster mentioned above, and, sociocultural tightness, ecological adaptation and biological variations which are also critical.

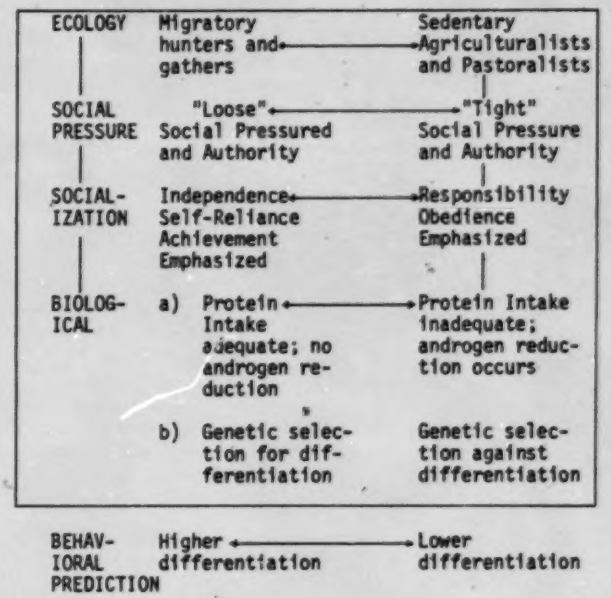


Figure 1. Clustering of Four Factors Considered to be Antecedant to the Development of Psychological Differentiation.[16]

It would appear that cultural differences in socialization, social conformity, ecological adaptation and biological effects may account for differences in behavioral patterns. Particularly significant is the possible connection of the cultural differences to cognitive functioning (e.g., perception and problem-solving).

Implications for Educational Decisions

It would seem that Witkin's paradigm and the results of research undertaken using the paradigm as a conceptual and investigative variable could have implications for some of the problems of education: i.e. problems that deal with human resource development and national economic and social progress.

One major area where it could have consequence is in the daily activity of a school. Witkin, on at least one occasion, has discussed psychological differentiation and the types of teaching methods, student evaluation and classroom placement used in schools.[17] Methodological concerns can be of a general or specific nature. The capsule descriptions given earlier for field-dependent and field-independent individuals should give some hints as to general teaching/learning methodology. Students who are field dependent are going to need many stimuli inputs for maximum learning. In addition to being told about something, they should perhaps see, feel, and taste objects wherever possible; this would match their inclination for concrete learning. The teacher will have to be more explicitly organized for field-dependent students. Since field-dependent students are diffused in their organization and don't have networks with connecting bridges between bodies of information, the teacher will have to provide these and not assume the students will generate their own structures. Field-dependent learners are apt to learn better in groups rather than isolated as individuals. Remembering that the field-dependent individuals are keyed into the social milieu in which they find themselves, and that their actions are mediated by the social environment, individualized learning may not be appropriate. Certainly, the presence of the teacher will be more important for the learning of field-dependent students and the teacher will probably be more influencial in the direction and amount of learning. The lack of the ability to isolate elements from a field for problem-solving on the part of field-dependent students can be overcome if the teacher recognizes that his/her inclusion and continual help is needed.

On the specific level, methodology may be important for subject matter acquisition. Some subject matter, in order to be successfully acquired, needs from the students a higher degree of differentiation than does other subject matter. For example, science subjects deal with knowledge removed from the embedded context of social and physical reality to a greater extent than literature subjects. Thus, methods used to teach science to students who are field-dependent, will differ from those used for students who are field-independent. More attention has to be given to drawing field-dependent students from their dependence on a social world to an understanding of objects in isolation, insofar as this is possible. Early lessons for field-dependent students will require more concrete examples. In fact, it could be that field-dependent students, once they learned science, could better apply the knowledge learned to practical uses than could field-independent students. Rosalie Cohen, in attempting to explain the lack of long range success by Headstart Programs in the United States, alludes to the failure of appropriate methodology.[18] She feels that the failure to teach children in the manner and style of the school predestines their failure in school.

In addition to the concern for methodology appropriate to the degree of psychological differentiation, there is a need for proper evaluation. Sociologists of education have frequently stated that one of the societal functions of schools is in determining the allocation and selection of human resources. Who will get an education? Of what kind? And how long? Evaluation techniques are one way in which some are selected, promoted and given an education suitable to grab at various opportunities. One researcher doing a content analysis of American standardized tests of intelligence and achievement, found that three types of skills were needed to be successful.[19] These skills are: possession of a great deal of knowledge (in depth and breadth), the ability to analyze in an abstract manner, and the ability to pull out pertinent data or information from an embedded context to solve a problem. Two out of the three are skills that field-independent people tend to possess due to their degree of differentiation. If the same is true about tests in other school systems, it would appear that the field-independent student is being favored in evaluation. Evaluation instruments should perhaps be designed in such a way that each type of differentiation can succeed.

The placement of students with a teacher should perhaps be planned with the continuum of psychological differentiation in mind. In his paper, "The Role of Cognitive Style in Academic Performance and in Teacher-Student Relations", Witkin has collected an impressive number of studies that show a high correlation for psychological differentiation with a teacher's choice of level of school taught, and the teacher's area of specialization with their level of differentiation.[20] Teachers, who are field-independent, tend to prefer the lecture technique for the dispersal of information . They tend to view teaching from the cognitive aspects (importance of the knowledge and structure of the subject) rather than from the social concerns of the students. Such an approach may be appropriate for field-independent students, but could be disasterous for field-dependent students. Manual Ramirez postulates that the lack of success by Chicanos in American schools is due to the gap of psychological differentiation that exists between students and teachers.[21] He claims that the teachers (white) are more field-independent than their students (Chicano). This difference is one of the major reasons that Chicano students don't learn what the school requires. Thus, it may be that placing children and teachers of similar psychological differentiation together may result in more learning. Also, it may be important to give attention to teacher training programs that either enlighten teachers to differentiation flexibility or that prepare teachers of differing differentiation for all levels and all areas of specialization so that children have improved chances for learning.

A second major area of education where psychological differentiation may apply is in the determination of school end-products. Should schools attempt to produce individuals at only one of the poles of the differentiation continuum? The answer to this question has two parts.

Whether a particular psychological differentiation is incumbent within a given aspiration of changed national characteristics is one issue (e.g., technological industrialization). The possession of field independence may be advantageous in the ability to perform certain skills. Each society probably needs some field-independent individuals, particularly as the technological complexity increases and technical skills are needed. But a population of field-dependent individuals has advantages, too. "In situations where social groups are in conflict over means, goals and values, a cognitive style (field dependence) that facilitates fine articulation

and sensitivity to the social environment may be considerably more helpful than a cognitive style (field independence) encouraging articulation of the self and to the external physical space." [22] In a newly independent country, populations with a field-dependent orientation may indeed be more able to function competently, particularly in achievement of national identity and inter-ethnic harmony than populations of high differentiation.

The second part of the question concerns the degree levels of psychological differentiation that can be deliberately changed. Available evidence seems to indicate that within any cultural system the possibility of changing its level of differentiation is slight.[23] In some cases of drastic social revolution, new governments have seen fit to alter the population's psychological differentiation through fundamental changes in its domestic and public institutions. A probable case of this occuring, for which adequate research data are not available, is the People's Republic of China.

If a country should embark on political, technological and economic development, what impact could the population's psychological differentiation have on its probable change? Witkin and Berry state "we may conclude that levels of psychological differentiation do make a difference in the process of acculturation. Level of differentiation is not merely a dependent variable, which shifts as a function of education, but is itself a contributor to the overall psychological experience of acculturation."[24] Thus the role of the school for social change may be critical.

This paper has only been a brief introduction to the interface of culture and cognition. Witkin's paradigm is not the sole result of many researchers work. Yet it illustrates the potential available through knowledge of cultural patterns. A cultural content can foster the development of predominantly field-dependent or field-independent styles within a society. Knowledge of the style formats gives direction to educational planning and strategy.

A content of multicultural education for educators and the general public that focuses on the content of cultures and patterns of orientation and behavior will have to be a major factor in the eighties. Success, in terms of learning and achievement, will be promoted through such content.

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NEW CENTURY DIRECTIONS IN TEACHER EDUCATION
AN ARGUMENT AGAINST PRACTICALITY

by

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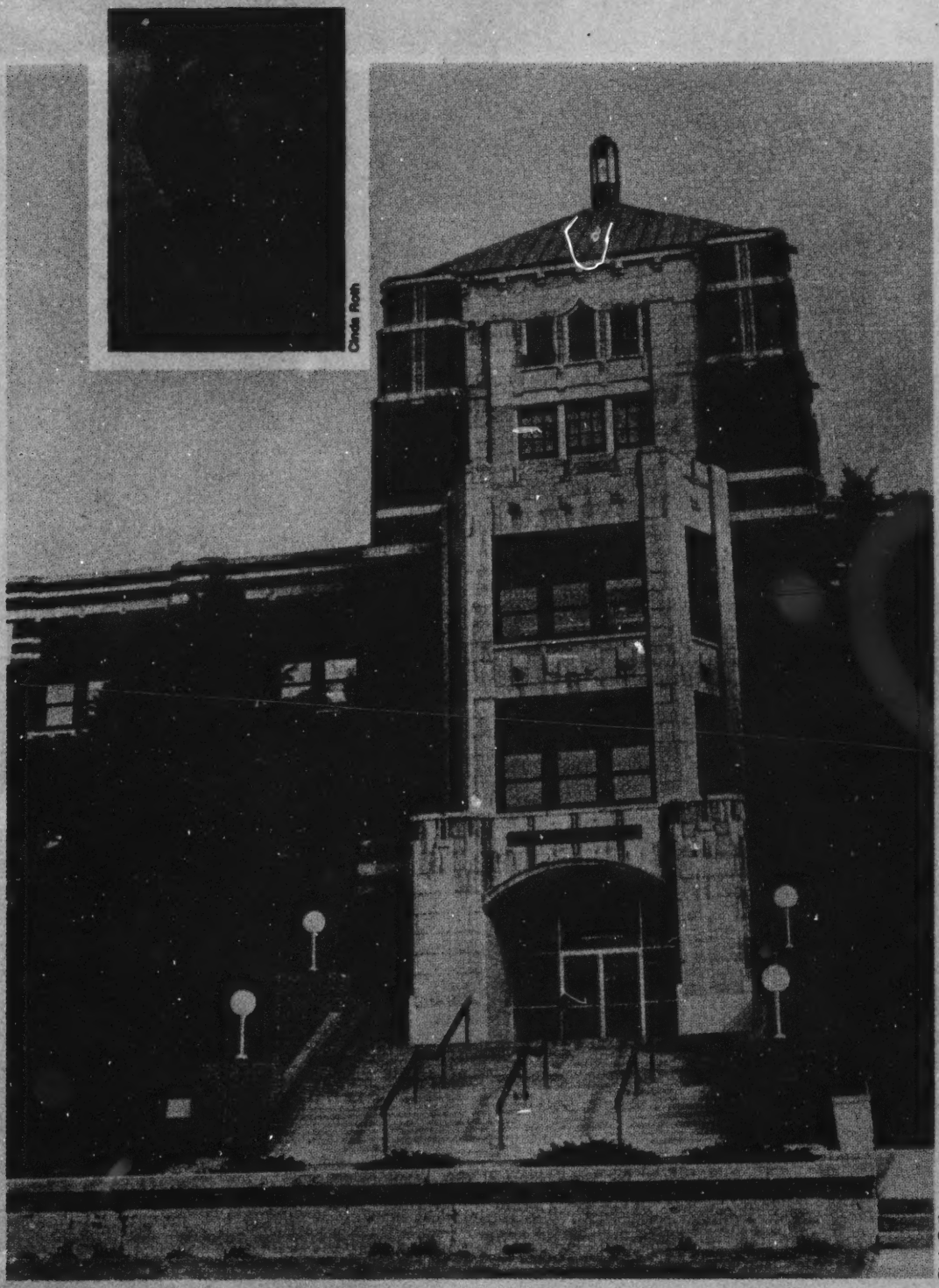
May 1980


Chris Roth
Chris Roth

This essay is concerned with education and the future. Specifically, it is concerned with the notion that education, in part, creates society's future and that society, in turn, creates education's future, and that education and society seem to be moving along divergent paths.

The fact is that those students enrolled in today's preservice teacher education programs will spend almost all of their careers working with children who will not reach their full citizenship responsibilities until the twenty-first century. Yet, most teacher education programs have, by and large, sought to follow the lead of current public school practice (practicality) rather than to forecast and educate for the needs of the next generation.

Our education system in general, and teacher education in particular, has always had a curious view of "preparing today's students for productive futures." The reigning theory seems to be to develop the skills, attitudes, and understandings of past success (as measured by material acquisition) with the assumption that the enterprising and hard working will discover how to apply these traditional values and information to the specific exploitation opportunities of the new generation. (This view, incidentally, is made possible only because of the incredible natural richness of the continent.)

This somewhat reductionist oriented philosophy has played a major role in creating and perpetuating a society-wide engineering mentality. This is the mentality which appears to accept the premise that the natural order of things can be totally directed toward the short-term gratification of one species. Obviously, such a view must be a major contributing factor to our current environmental, energy, and population dilemmas, and it is this same engineering mentality which has influenced the direction of teacher education throughout its history. In fact, teacher education might be better referred to as "teacher engineering."

Teacher engineering, along with our exploitative industrial technology has enjoyed unparalleled growth during the twentieth century. Like our technology, education has fed upon its own brand of materialism: i.e., increased population produces increased enrollments and, consequently, increased demand for teachers. Growth has continued to the point where we now have 2.5 million teachers engaged in teaching 45 million public school students (Campbell, et.al., 1980) and utilizing curricula based upon the fostering of technological exploitation and socio-psychological acceptance of an infinite growth philosophy.

For some time, the infinite growth philosophy has been alive and well and teacher education has embraced it wholeheartedly. During the past several decades, the job market for new teachers has been excellent and we have been spending the money which results from enrollment-driven budgets in even more "market response" programs, including increased specializations and decreased student-teacher ratios.

Standards, which have never been as demanding as in other pre-professional programs, have not been improving. In fact, the somewhat embarrassing tendency for anti-intellectualism in teacher education has grown to be a justifiable trait supported by such myths as, "the teacher who has a bent toward academic excellence will be less likely to understand the average and below average child." We have, in fact, compromised quality for the euphoria of infinite growth.

Over the past decades, this trend became so prevalent that we came to accept that curriculum design was beyond the capacity of teachers and it became the province of curriculum specialists and the major publishing companies. In an attempt to shore up public education, the programmed curriculum projects were born, complete with daily lesson plans, student handouts and worksheets, and scripts for teachers to use in question-answer sessions.

Such materials reinforced the "practicality" issue. Teachers did not need to make content decisions, we told ourselves, nor did they need to design instructional approaches. If we could produce materials of sufficient quality, the teacher would need only to manage the exposure of children to those curriculum materials. The major teaching skills, therefore, came to be organizational and managerial in nature, and many methods courses evolved to be little more than a superficial overview of the more common projects in use in the public schools. Such intellectually demanding topics as, "how to fill out a report card," became standard fare and students came to see student-teaching as the only important component of teacher education rather than the culminating experience.

Even though the "quality materials" approach was a real effort at improvement, it was, in reality, a simple minded one. Teaching is an intensely human enterprise and any attempt to improve the quality of education that does not improve the teacher - first, as an education individual and second, as a practicing professional - is doomed to eventual failure.

By the decade of the seventies, the infinite growth and assembly line industry of teacher engineering was beginning to experience real difficulties. The market for new teachers was declining. Even the most unsophisticated planning surveys indicated that the children of the post-war baby booms had all made their way through the educational system. Changing social perceptions, the expansion of women's opportunities, and the positive economics of two paychecks (especially in an era of inflation as experienced by a generation educated to expect materialistic growth) all mitigated against large families ever again becoming popular.

The declining enrollment woes have been compounded by an inflating economy. As the inflationary pinch becomes more painful, public and political demands for "accountability" grow and we see a kind of system-wide panic setting in.

Teacher education with its tendency for reductionist thinking has found itself unable to respond to these problems except within the confines of its engineering mentality. In our panicked response to dropping enrollments, we have found ourselves reducing standards for both admission and matriculation. We have moved increasingly to programs where course content is dictated by the student, rather than by faculty, and we have defined faculty quality in terms of student popularity (straight-line, short-term thinking at its worst).

Graduate studies, especially at the master's level, have been perhaps the least responsive to the shifting needs of the profession. Admission to a master's program in education is virtually guaranteed, academic rigor is all but non-existent, and receipt of the degree is dependent primarily upon the willingness to purchase the prescribed number of credits. The great majority of students enrolled in these programs do so for "practical" reasons (i.e. recertification and movement on salary schedules) and, therefore, have little commitment beyond those short term goals. Offerings in both the oncampus and in-service formats are almost totally at the dictate of the student by tying the existence of courses to a minimum enrollment (exceptions are those few courses which are required of all candidates and even here, the pressure to make these "practical" by virtue of student evaluation is immense).

So, we find ourselves in 1980 with an educational system in severe trouble - a public system being increasingly accused of ineffectiveness with skyrocketing costs (yet with teachers whose salaries keep them just above poverty levels) and a teacher education system which is in even worse financial straits and on the verge of losing its own self-respect. We have now come to the point where the salvation of America's education system is possible only as a result of what will appear to some as a radical new direction, perhaps even a heretical one: i.e. a redefinition of "practicality."

We must redefine practicality in terms of skills and abilities of the future rather than the past or even the present. This means that we must begin to view the past and present as tools to project probable futures and to see education as both preparation for the future as well as a means for inventing, or selecting, that future. Practicality in teacher education must become a process whereby the inventors of the future are both identified and assisted in their work.

Allow me to illustrate my point by making some highly probable projections of future environments and extrapolate from these to education and teacher education.

1. <u>We can expect to see a continuation of the knowledge explosion</u>.

   Knowledge is increasing exponentially and, barring monumental disaster such as all-out nuclear war or catastrophic collapse of our ecosystem, there is no reason to see this trend stopping. This means that the concept of a knowledgeable individual cannot be based upon the quantity of information acquired, but more upon the ability to put information to work. Educationally, this would point toward increasing emphasis upon the development of critical thinking skills, data gathering and processing technology, and systems theory.

2. <u>At least for the next generation, we can expect to see continued increases in the costs of conventional energy and natural resources</u>.

   This trend will stimulate a variety of technological responses and correlated shifts in attitude toward energy-related activities.

We may well see increased decentralization in jobs and entertainment. With the technology currently available, it is possible even today for many professionals to conduct business from their homes rather than commuting to a central office every day. Meetings can be conducted by conference call, correspondence dictated to a recorder over the telephone, and with relatively inexpensive computer systems, terminals connected via telephone lines to central storage banks can bring the professional into contact with his or her employing firm without being physically present. At Eastern Montana College, for instance, undergraduate and graduate courses are being taught by telephone to as many as twenty-five different sites simultaneously with the professor conducting the class from his or her home office.

In terms of entertainment, decentralization is a reality now and is rapidly growing in popularity. Developments such as Home Box Office, seven-foot television screens, and sophisticated yet affordable sound systems may only be the precursors of virtually unlimited capacity home entertainment environments of the future.

Our attitudes as a society toward home entertainment are already well formed with the ever present television set and the family room as a standard feature of the middle class home. Add to this the rapidly developing computer entertainment industry, and the typical family room could become a marvel of sight, sound, mood, and intellectual sensation in the very near future.

Social acceptance of decentralized entertainment is much higher than social acceptance of decentralized jobs. We still have the mental set of the worker "going off to work" every morning and "putting in his eight to five." However, as the costs pressures associated with physically transporting the individual from home to work and back continue to grow we will see many alternatives to the rush hour; decentralization will be one of the more attractive ones in those occupations where it is feasible.

Educationally, the task we have is one of preparing students for careers which may be considerably different (on the surface) from careers of the present. We need to prepare our students to be self-directive and task conscious rather than followers of authority and time conscious. This will not be easy since public education is almost totally committed to control issues, discipline, and following instructions. In teacher education, we must immediately begin to develop the means whereby teachers can educate children in self-reliance, organization, and pride-in-task; unfortunately, we know precious little about how to do this. At this point, our best response is to turn major research efforts in this direction.

There are, however, some predictable skills associated with decentralization. In addition to teaching how to communicate via the written medium, we need to prepare students to communicate via electronic media, especially by telephone and computer. These "entry level" skills to future communication lead to the next probable projection of future environments.

3. We will become increasingly dependent upon "ethnotronics."

The concept of ethnotronics was first introduced by A.M. Harkins (1976) and in essence refers to the notion of "intelligent purposefulness in inorganic systems." In other words, intelligent machines. Harkins and Joseph (1979), in remarks prepared for the Second Annual Futures of Education Conference of the World Future Society, presented an overview of the growth and probable futures of ethnotronics. If even a small percentage of their forecasts are realized, we will, in the very near future, be faced with an educational system that will be totally out of touch with society - unless new directions are taken specifically by teacher education.

Harkins and Joseph project a near future which will be characterized by business, industrial, educational, medical, and human service dependence upon ethnotronic systems.

Educationally, the schools will be faced by a reality unprecedented in its history; i.e. every teacher and every classroom could have access to virtually all of the world's knowledge. Teacher education in its penchant for reductionist thinking has never dealt with the possibility that teachers would ever be anything other than ignorant. With the advent of ethnotronics, however, ignorance will be by choice, not necessity.

To prepare teachers to deal with total knowledge access, we must provide them with the tools necessary to integrate and develop knowledge. These tools include those of critical thinking i.e. scientific logic, as well as a framework for knowledge integration. The discipline which seems to hold the highest potential for such integration is the discipline of general systems theory. This "new science" is defined by one of its founding fathers, Ludwig von Bertalanffy (1967) as:

> General system theory may be considered a science of "wholeness" or holistic entities which hitherto, that is, under the mechanistic bias, were excluded as unscientific, vitalistic or metaphysical. Within the framework of general system theory, these aspects become scientifically accessible. General system, therefore, is an interdisciplinary model which needs,

but also is capable of scientific elaboration and consequently can be applied to concrete phenomena. This is its "scientific" aspect. Like every more general theory or model, it also has its aspects as "metascience" or natural philosophy; that is, it influences our world outlook; and appears to be broader and more realistic than previous, mechanistic philosophy.

So, even with just these three projections, we find teacher education faced with making significant decisions about its future. We can succumb to our history of reductionist thinking and choose to pacify those calling for accountability by increasing our rhetoric and efforts in "practicality," or we can begin now to build the schooling of the future. If we choose the former, we will continue in business for awhile. However, we can be assured that education and society will become less and less in touch with each other - an unnatural state which will not long survive. On the other hand, we can choose a future orientation - an orientation which features the educator as the fundamental architect of society and teacher education as the process whereby that architect develops the skills of invention.

The ball is in teacher education's court. We will either change or be replaced.

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SECONDARY TEACHER EDUCATION OF THE FUTURE
THE COLLABORATIVE MODEL

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May 1980

Teacher Education in 2001

Projecting to the year 2001, we find a collaborative form of secondary teacher education:

Graduates from an undergraduate teacher education program are recognized as partially trained professionals, ready to enter a second phase of their training. A new graduate is certified as an apprentice teacher. During the first three years of employment with the public school, the apprentice teacher is visited frequently in tes[illegible] classroom by master teachers and/or university faculty members. These visits are part of the professional development and evaluation of apprentice teachers wherein the visits are used to assess and reinforce skills gained through individual participation in a series of planned learning opportunities. These opportunities consist of independent studies, video tape review and nighttime or weekend courses. The apprentice teacher is encouraged to work with master teachers and university faculty as te works towards fully certified, master teacher status.

Some teachers elect to return to the university to work toward becoming full-time university faculty members rather than working toward a master teacher certificate or receiving specialized training to assume a new role within the schools such as counselor, curriculum specialist, or administrator. These teachers, then, become more involved with the academic content of teacher education.

Teaching at the university level in 2001, however, does not allow a person to become isolated or out of touch. Fully one-half of the university teacher education staff are persons having master teacher status who are released from the public schools for one to four years to work for the university. And, perhaps most importantly, in order to retain one's position on the regular university faculty, every professor must spend from one to nine months every five years on a temporary assignment with the public school district or with the cooperative education service.

Regular faculty members are required to do both teaching and research at the university. Research in education is planned and designed in cooperation with administrative personnel and master teachers of the public school system. This cooperation assures that university research is relevant to the teaching profession. University research, for example, answers questions on the effectiveness of various teaching methods and tests new teaching materials and/or procedures as they relate to student achievement.

In the year 2001 artificial boundaries between teacher education and professional experience, and between the school district and the university have been eliminated. University (preservice) teacher education, school district field experience (student teaching), school district teaching - first as an apprentice and then as a (fully certified) teacher - continued teacher education (inservice), university teaching (academic professor), and continued collaborative experience all blend into a continuum. (The words listed in parentheses are those words that were in usage during the late twentieth century and described isolated, nonrelated events in a teacher's career.)

The Traditional Model - 1980

The traditional teacher education model as described in the following paragraphs is an over-simplification of its own most stringent characteristics. In actual practice there are many variations on the model ranging from strict segmentation all the way to the collaborative ideas now used in some schools.

In most universities, the preservice, or undergraduate secondary teacher education program is taught entirely by regular university faculty. There is little involvement of school districts in university teaching or curriculum development. There is little or no field practice in the first two years of the program. Education foundation courses are offered during the junior year, but field experience is limited to between five and ten clock hours of formal observing in classrooms. Finally, during the senior year, students are given methods courses and are allowed to work as student teachers for eight to ten weeks. During this time, the student teacher works with school district personnel, primarily with a cooperating teacher in a single classroom. The student teacher is visited several times by a supervising university professor. The typical successful graduate of this teacher education program has had 270 clock hours of professional classroom instruction, 100 clock hours of observing teaching practice and 100 clock hours of actual teaching and is considered a fully certified, completely trained and capable teacher.

During the first three or four years of professional employment, new teachers are expected to effectively handle all teaching situations, i.e., to sink or swim. There are few planned skill building opportunities designed jointly by the university and school district for enhancing the teacher's competencies. Most of the graduate courses offered by teacher education institutions are aimed at preparing teachers for different roles in education such as administrator or counselor. There may be selected days for school district inservice training, but little follow-up classroom work with the teacher. There are few, if any, planned observations of the teacher's work as part of the professional development program. The teacher is expected to be an expert, but in reality, is learning to teach through trial and error.

During their first five years, teachers are required to fullfill re-certification requirements. The teacher, for the most part, turns again to the university for self-selected coursework. Teachers naturally prefer to take those courses that are offered locally. Again, most of the available courses are designed to train special educational personnel. Few, if any, courses are designed to improve the skills of the classroom teacher.

Inservice training offered by the school district is a set of isolated, somewhat random experiences made available to all teachers in the school district. Some inservice education is a highly organized effort attempting to facilitate a new curriculum plan. Even these efforts are seldom designed to meet the needs of the classroom teacher.

The traditional model can best be characterized as a series of isolated events with very little linkage.

Constraints of the Traditional Model

The stated goal of teacher training is to prepare teachers who can maximize student learning. However, the profession cannot describe how teachers are to achieve effective teaching. There is very little conclusive research on teaching and it is impossible to give teachers a definitive method that will be equally effective in all settings.

Teachers must learn a wide array of skills and strategies to engage all students in meaningful learning activities. Teachers need to recognize when something is not working, to draw on other approaches, and to understand and apply new strategies according to the demands of each individual learning situation; thus, requiring that teacher education be a continuous cooperative venture between the teacher, the school district, and the university. Moving through a series of isolated events does not enable the teacher to take full advantage of his or her professional training or to view these experiences as part of integrated professional development experience.

Due to the inharmonious nature of the traditional model, teaching has become a public profession (Ryor, 1979). States require teachers to obtain periodic re-certification in order to keep their licenses. School districts require evidence of additional learning and university credit hours before teachers can acquire salary increments. There is an assumption by both the state and school district that teachers are responsible fiscally for meeting these requirements. They may select from a wide variety of experiences to fulfill the requirements. Yet the teacher is expected to acquire, through this loosely designed process, the skills necessary to handle a role that is becoming increasingly complex.

School districts now control what they want their teachers to learn. The university is generally unable or unwilling to offer the content or programming controls desired by the school district. Thus, the teacher who is responsible for both the school district's targeted training and the university graduate credit, is forced to accept a less than adequate professional development plan.

Universities have numerous and complex organizational reasons for not becoming more intimately involved with inservice training (an excellent and thorough discussion of these organizational constraints has been written by L. Carey and D. Marsh, 1980). State and school district policies and regulations also discourage cooperation with universities or joint utilization of their resources. The end result is a nonproductive situation where the advanced training of teachers is impaired.

The Collaborative Model

The collaborative model of teacher education involves continuous cooperation between school districts and universities throughout all phases of teacher training: preservice, inservice and work towards the advanced degree. Teacher education and professional employment are represented as a continuum of related experiences. The model requires a continuous flow of personnel and expertise involving: the school district, the teacher education unit, professional organizations and the teacher.

In this model, school districts are involved in curriculum and program development of the university. Preservice students are involved in a variety of experiences prior to student teaching, such as classroom observation, tutorial work and actual classroom teaching. With completion of the baccalaureate degree, there is a three year "apprenticeship" for the new teacher. School district and university personnel are involved in a planned professional development program for each apprenticeship.

Activities planned for the apprenticed teacher emphasize an individualized approach. Traditional district inservice and university graduate course work remains, but other individualized experiences are added. Professional development in this model does not focus on general competencies and skills but on strengthening the competence and performance of each individual apprentice. The program is collaboratively developed and carried out by both university and district personnel. The objective here is the development of a master teacher, not preparation for some other role in the profession of education. The expected outcome of the apprenticeship period is the preparation of a fully certified teacher.

Fully certified teachers also need support for improving their teaching skills. In this model such support is provided through joint efforts of the school district and the university.

There is a need for differentiated staffing in the public schools whereby a teacher's skill is recognized in assignment of responsibility, status, and salary levels as a teacher advances from apprentice teacher to fully certified, master teacher.

Implementation of the Collaborative Model

In order for the collaborative model to work, a differentiated reward structure for increased teaching skills must be instituted. The efforts of districts and universities should build upon one another, thereby contributing, together, towards the improvement of the teachers' skills, the maintenance of teacher accreditation, and the teachers' advancement from apprentice to master teacher.

Of no less importance is involvement of teacher associations and unions. Effective implementation of a more meaningful professional development plan rests heavily upon alerting existing personnel and staffing practice to which educators currently are so closely wedded. Specifically, for individual professional development programs to succeed, both undifferentiated staffing and undifferentiated award/reward systems, primarily salary, must be abandoned.

Individual professional development programs must develop hand-in-hand with the unique abilities of teachers. It is evident that some teachers perform some tasks better than other teachers and that teaching tasks can be differentiated. Some tasks are extremely sophisticated: for example, organizing, planning, discussion and management. Others require minimal skills: for example, operating a movie projector or administering and grading objective examinations. In a collaborative model emphasis is on differentiated staffing, providing attention not only to matching tasks with abilities, but more importantly to allow for promotions within the broad professional field called "teaching."

Differentiated staffing suggests a differentiated salary program. Such a program would not only demand that the salaries be associated with a task of classification of teaching, but also related to performance criteria within the classification. At present, merit salary considerations for teachers are, for all practical purposes, non-existant.

To attract and retain competent teachers, the undifferentiated practices of today must be abolished. Without such a move, so-called professional development programs encourage good teachers to pursue optional careers such as school administration, special services, and guidance and counseling. Contemporary professional development programs provide few, if any, incentives for teachers. There is little professional advancement within teaching and few monetary rewards for meritorious service.

The 2001 module depends upon significant policy changes by school boards and teacher professional associations. Collective bargaining agreements must address differentiated staffing in tenure and merit pay increases. The position, as outlined in this paper, assumes the hurdle will be addressed and can be conquered.

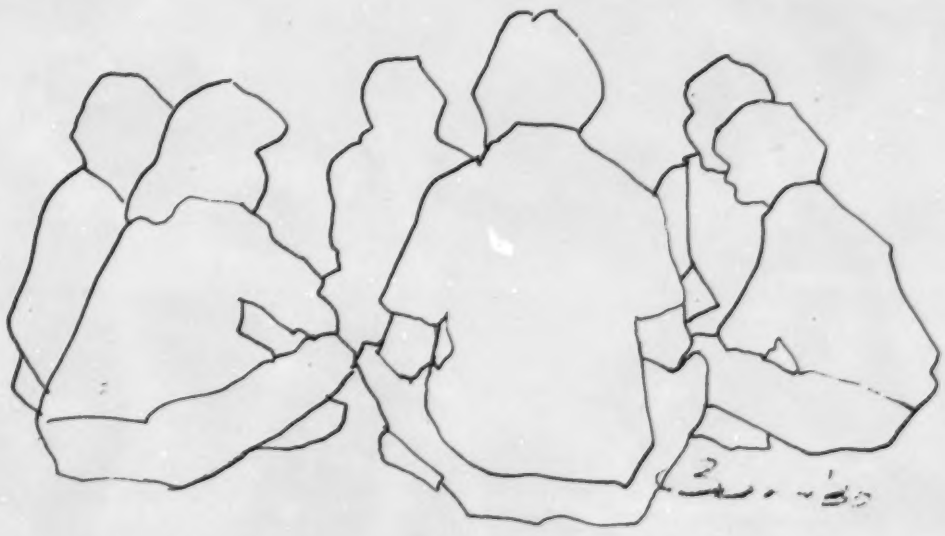
Universities must also redesign their staffing patterns and instructional programs. There has to be a willingness to employ master teachers for two- to three-year periods and a willingness to become involved in an exchange of professional personnel. Undergraduate secondary teacher education programs should contain substantially more field experience that is supervised by school district master teachers holding joint appointments with the university. Graduate programs designed for persons wishing to stay in the classroom must be made available.

Before there can be satisfactory movement toward the collaborative model, we must understand why sharing the educational training turf is so difficult (Weaver 1979). Collaboration will require more than goodwill. There must be an agreed upon distribution of power, status and authority. There are many regulation and revenue issues that must be negotiated. Everyone must be willing to give a little in order to gain the benefits.

The Role of Teacher Corps

Teacher Corps projects provide an ideal opportunity for collaborative work between school districts and universities. The current Teacher Corps legislation mandates collaboration on a redesign of local in-service programs and university teacher training programs. These projects are intended to use a shared decision-making model to promote positive changes at all levels. Those Teacher Corps projects that make full use of the professional resources at both institutions (universities and school districts) should be able to explore many aspects of the collaborative model. This exploration can include some exchange of personnel.

The dynamics of program change within the institutions is similar to that of career development within individuals. Institutions must progress through a sequence of developmental stages including awareness, exploration, commitment, and reaffirmation. Institutions participating in Teacher Corps projects are clearly at the awareness level regarding the collaborative model. If these projects use their resource wisely they can easily move to the exploration level. The added resources make it easy to solve many of the logistical problems and, for example, to use selected staff from local schools as instructors for university credit experiences. This exploration can be accomplished without posing a serious threat to job security of regular university faculty members. At the same time, the project can give fiscal and organizational legitimacy to the use of university personnel for selected school district development assignments.



These opportunities will allow faculty to learn many new things: how to play the role of the referrer, diagnoser, linker, and individual teacher consultant. College faculty will also be encouraged to find new and different forms for delivering professional programs to classroom teachers and to school administrators. As a result, higher education will develop new structures for funding and rewarding faculty involved with inservice activities. Faculty will no longer see inservice as a supplement to the regular college program used primarily to provide extra income for faculty members.

There are few specially funded and/or legislatively mandated opportunities that have the promise of Teacher Corps projects for exploring the dimensions of a proposed collaborative model. But the promise for testing the collaborative model won't be fulfilled unless institutions recognize the opportunity and include these ideas within their explicit objectives.

[1]"tes" is a word coined in the 1960's and used commonly thereafter in place of 'his or hers.' Similarly "te" replaced the words 'he or she.'

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WHAT KIND OF INSERVICE MAKES A DIFFERENCE?
K-12 CONCENTRATION UPON STUDENT LEARNING SKILLS

by

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Inservice that makes a difference must meet four major criteria. One, it must address an expressed need within a school system. Two, it must produce observable results, both immediately and on a long term basis. Three, it must increase each participant's job efficiency and productivity. Finally, it must cause an increase in the accuracy of communication between teachers within the school system.

This article addresses inservice that can make a difference in Teacher Corps related schools. An approach to an inservice design concentrating upon student learning skills is presented. This approach involves uniting K-12 educators in productive activities that respect multicultural rights and implement diagnostic and prescriptive planning techniques.

Educators at all levels need to be better equipped to diagnose student performance to look beyond the immediate task to the learning skills that are required. Prescribed instruction of learning skills is at the very base of the process of learning and will increase a student's ability to learn. The manipulation of student learning skills is mandatory for success in formal schooling. Openly teaching student learning skills, rather than assuming they have been acquired, may be the foundation for education that is multicultural. In addition to instruction which relates to our cultural bases, we must teach aspects of the culture of schooling. Theory and activities supporting an inservice design that can make a difference then follow.

Student Learning Skills

Student learning skills are those skills which support each student's academic survival. They are not the debatable "basics," but the skills which are the foundation for optimum achievement in formal schooling. Student learning skills are best illustrated by observing such student action as: following verbal and written directions, completing assignments on time, asking relevant questions, being prepared for class, arriving at class on time, cooperating with other students and displaying a positive attitude. They are the skills of learning that are too seldom directly taught, but which do directly influence each minute of classroom education. The commonality of student learning skills demanded at the various grade levels is frequently overlooked as a unifying factor for system-wide inservice training. When teachers are caused to examine their common concerns relating to learning skills, additional information and skills that add to increased teacher proficiency and peer communication are provided.

Why this inservice makes a difference. Inservice concentration upon improvement of student learning skills meets the criteria for inservice that makes a difference. First, it addresses a need expressed by K-12 teachers: that of increasing the student learning skills and therein increasing the student's responsibility for his/her own learning.

Educators at all levels admit a desire to decrease the number of tardy assignments, to minimize the need for repetition of directions and to simply have students come to class with a pencil in hand ready to work. Regardless of the age of the students they instruct and the subject matter they communicate, the need for improved student learning skills is a factor common to all classroom educators.

Secondly, inservice that emphasizes improving K-12 student learning skills produces observable results, both immediately and in the long run. Many educators expect a high proficiency of student performance in the learning skills, yet they do not directly teach the skills themselves. The assumption that students have totally absorbed superior learning skills at sometime during their earlier schooling is frequently inaccurate. Direct, purposeful instruction of student learning skills results in observable accomplishments. For example, a school system's teachers can decide to unify in an effort to have all students be prepared for class. Following the implementation of teacher actions agreed upon during the inservice sessions, primary students will begin to bring permission slips or art supplies in preparation for announced activities, middle years students will be influenced by their teachers to bring a pencil and appropriate texts, and high school students may tend to appear in class with thought-out questions and totally completed written assignments.

Thirdly, inservice which stresses student learning skills increases the productivity and job efficiency of each educator. Valuable instructional time is gained as distractions due to inefficient student learning skills are reduced. Instructional time begins to fill the minutes that used to be consumed by interruptions from tardy students, irrelevant questions, repeated directions or re-explaining incomplete assignments. In addition, the teacher stress derived from continually dealing with student claims of lack of pencils, "lost" assignments or misunderstood directions can be severely decreased. Those teachers who operate in a classroom that has fewer interruptions can go about their jobs in a more relaxed, and systematic manner.

Finally, inservice that concentrates upon student learning skills increases the accuracy of communication between teachers within a school system. As K-12 teachers discuss specific teaching strategies for a student learning skill, they will note those differences which make them excellent teachers for the age of student they have chosen to instruct; i.e. the teacher differences are those that arise from differences: developmental learning patterns for children as they progress through primary, middle and secondary years. They will also recognize that there is a transition in responsive learning skills as students progress from early primary grades to high school classroom atmospheres.

When educators discuss appropriate means to cause a purposeful following of written directions, primary educators will emphasize "how to," middle years teachers will stress "reward for," and high school personnel will concentrate upon "incorporation of," (Art, 1980). For example, primary educators may devise ways to teach how to recognize a sequence, how to follow a progression or how to compare the degree of student progress to the criteria desired. Middle years educators may approach the teaching of how to follow written directions through having the student understand the rewards to be gained if they implement the skills. Following a cake recipe, working with less adult supervision and completing a task quicker are the rewards the student gains through using the newly taught learning skill. Secondary educators tend to build upon this task, emphasize maturity, and promote student learning skills as an internalized whole. They may stress following

written directions so that students may incorporate the skill being taught as a thinking tool in production of complex written assignments, and, therein, use it as an aspect of their daily lives.

In addition to recognizing their different strengths, educators will be able to borrow the logics presented by professionals at other levels of education and apply them with modification to students in their own charge. High school educators, facing students who do not possess effective student learning skills, will now be able to more readily decode the problem, and then may use the modified instructional logics of primary or middle years teachers. Educators who work with students and who use matured learning skills will be able to borrow professional techniques employed at other levels of education because their openness in searching for improved student learning skills has caused them to be slightly more flexible.

Teacher Corps related schools have generally received more than normal exposure to special consultants, educational conferences, and state department and university personnel. In efforts to fulfill our project goals and objectives, Teacher Corps schools have frequently looked to "outsiders" for assistance. Inservice, related to student learning skills, can make use of the expertise existing within our school's personnel: activities can be specific to school needs and observable results can be credited to the involved system personnel.

Inservice Concentration Upon Student Learning Skills

An approach to inservice, designed to concentrate upon student learning skills, follows. When using this inservice approach, K-12 educators should mutually agree upon seven specific skills from a prepared listing of twenty-three (23) which need system-wide attention. Small group, then large group concensus, should be used. A listing of student learning skills such as the following should be used.

Student Learning Skills

1. Follow verbal directions
2. Follow written directions
3. Participate in classroom activities 100% of the time
4. Complete assignments on time
5. Return legible papers
6. Spell at an acceptable level
7. Display a positive attitude towards learning
8. Recognize individual accomplishments
9. Retrieve own information when assigned

10. Have an organized work area
11. Use supplementary materials
12. Identify a learning style that is personally effective
13. Use time wisely
14. Be prepared for class
15. Take notes in an accurate manner
16. Discriminate between fact and opinion
17. Work in an orderly manner
18. Study for a test
19. Take a test calmly
20. Ask relevant questions
21. Cooperate with other students
22. Come to class on time
23. Work independently when necessary

(Arth, 1978)

After large group concensus is reached, writing committees should be formed to address specific instructional strategies for each identified student learning skill. Each committee should have representatives from the primary, middle years and secondary levels to insure comprehensive input to discuss the transition of study habit skills within formal schooling. Four teacher writing committees are recommended: one to record specific methods and activities for teaching each skill; a second to note alternative times for teaching the skills; a third to address evaluation techniques and to provide evidence that change has taken place due to K-12 attention to selected student learning skills; and a fourth committee to examine areas in the curriculum that cannot use the skills selected. This group may consist of educators who teach such subjects as physical education, art, vocational education or home economics. Their specialities may cause them to view necessary student learning skills differently than the total group. The committees should work interdependently, with "runners" communicating information that is found to be mutually important to all the committee writers.

The products of each writing committee should be typed, duplicated and distributed, allowing each teacher in the school system to have a ready reference to the decided upon actions. Following the in-service decisions and written productions, these actions should be implemented by K-12 teachers.

The following list is a brief example of prescriptive methods and activities that might result from a committee discussing #23, "coming to class on time."

1. Since some upper grade students are tardy to classes, due to combing their hair (etc.), place mirrors in classrooms rather than in restrooms.

2. Cause students to attach pens or pencils to their notebooks or clothing, so that they are not lost in transit between rooms or areas.

3. Direct a few minutes of each class session to cause students to organize papers, materials and thoughts necessary for the following period.

4. Cause students to carry supplies for two sequential class periods, so that unnecessary trips to their lockers or storage areas are eliminated.

5. Teach "lining up", by holding hands and snake dancing around the room so that the orderly process of leaving or entering an area does not use time inefficiently.

6. Do high motivation, fun activities for the first two minutes of class.

The committee authoring the report concerning scheduling of the instruction related to improving student learning skills will have two written products: 1) The recommended time, each day, that K-12 teachers should address the selected skills. For example, at the conclusion of each class period, at the beginning of each class, or only at specified times. Some instruction may best take place informally, on an individual basis between classes or after school. 2) The sequence of development of the selected student learning skills. This would involve input from primary, middle years and secondary educators relating to the maturity of student learning skills they expect when students enter their level of education, and the skills they expect upon exit of that level. For example, given the student learning skill of following verbal directions, middle years educators may desire an entry level of completion of a three-step verbally directed task, and foresee an exit skill of completion of a five-step task, or even less of a dependence upon verbal signals. Desired entry and exit skills should be negotiated, and set as goals, for K-12 teachers uniting in a continuous progress of student learning skills.

The evaluation writing committee should focus upon written techniques which could be employed as pre- and post-test evaluation devices. They may choose from formal and informal means of measurement, and may seek assistance from student groups or other teachers. Students displaying increasingly positive attitudes could be measured by attitude inventories or a counting of behaviors that connote a positive attitude. Lack of eye contact with teachers, slouching in chairs, and consistent lack of cheerfulness are signals that teachers can count as a means of measurement toward improvement in some instances. Attendance records and school vandalism reports, dutifully kept, can also be noted as pre- and post-test measurements.

The fourth writing committee, consisting of individuals who put into priority a set of student learning skills different from the majority, would address the same issues. For their selected student learning skills, they would record teaching methods and activities, devise a schedule for instruction and note feasible evaluation techniques. They are responsible for unifying their written product within the total.

This approach to inservice makes a difference. Teachers work together, advancing their professional communication as they accurately teach learning skills that are the keys to continued involvement in education.

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STUDENT EMPLOYMENT: IMPLICATIONS FOR TEACHERS AND SCHOOLS

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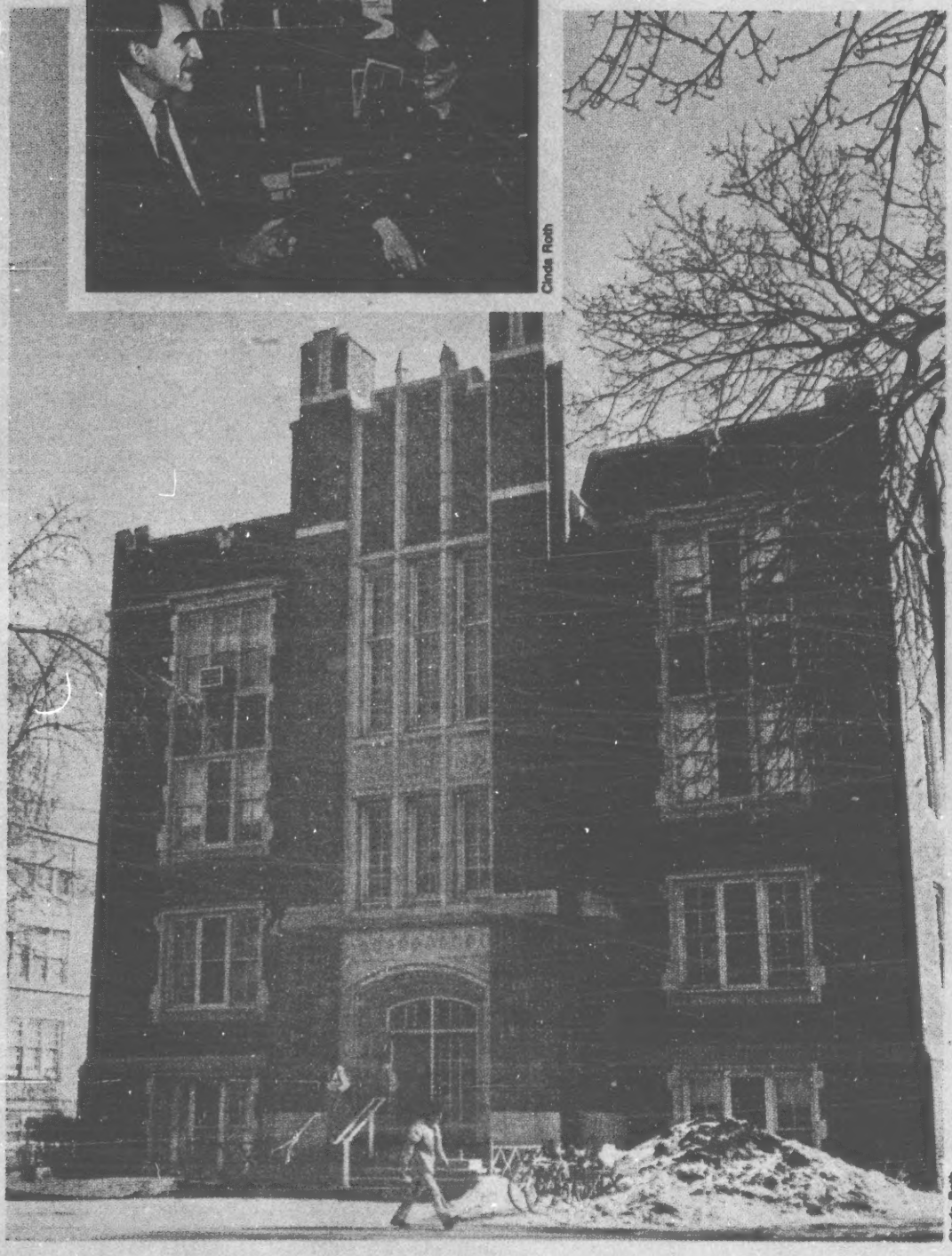

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EDITOR'S NOTE:

Discussions of professional development for educators frequently leave out a consideration of the relevancy of the content of schooling. Educators tend to believe that school should be the center of interest and activity for youth. This belief often causes educators to see mastery of course content and participation in school activities as the primary duty of youth. They see school as an isolated life experience independent and separate from the world of work. At the same time, there is a growing national concern about youth transition from school to work. Business, industry, and community leaders are making a strong effort to influence school programs. The leaders of this work-oriented social view want schools to take part of the responsibility in preparing youth for the transition from school to work. Educators frequently see this request as an intrusion on the school program. Too few educators have a comprehensive view of the role of schooling in the preparation of youth for the world of work.

The following article by Cecelia Traugh and Vito Perrone deals with a part of this issue. As a result of reviewing their report, we should be able to identify a number of implications for modifications to the professional development program for present and aspiring educators.

Introductory Statement

In this article, we will outline a dilemma that faces secondary schools and teachers. The dilemma - namely the appropriate role of schools in relation to work experience for students - grows out of a currently changing cultural circumstance which has important historical roots. While the dilemma could be addressed from a variety of perspectives, we have chosen in this article to focus on teachers. We have organized our presentation into three parts: (1) A context, including an introduction to our research base; (2) teacher responses; and (3) implications for schools.

A Context

The vast majority of American young people, ages 15-18, attend and graduate from secondary schools. The graduation rate is close to 80% nationally and 90% in North Dakota. This was not the case a generation ago. Prior to 1950, for example, the majority of young people left school before graduation in order to enter the job market.

Those who wrote about youth in the 1960's, a time when high school attendance was escalating rapidly, used the term "schooling in society" to characterize this new circumstance. Associated with this "schooling society" was the belief that young people were engaged in an "extended adolescence." One of the characteristics of this phenomenon which received considerable attention was the perceived lack of work experience among students. In the course of the 1970's, there was sufficient concern about the issue of work experience that "career education" became a prominent educational direction, and a number of secondary school reform proposals gave significant attention to provisions for students to work in the marketplace.

Perhaps by oversimplification, the reformist concerns were triggered by a sense that, extended adolescence had fostered enlarged levels of irresponsibility (increased drug and alcohol dependency being manifestations) and contributed to increasing levels of unemployment among young people 18-24.[1] The literature of reform suggested that young people in school were not being prepared sufficiently for the responsibilities of work and couldn't, as a result, cope constructively with adult life roles. The antidote which filled the reformists agendas was to make work an integral part of student's high school education.[2] By integrating work experience students would be expected to make a natural transition to the world of work and would not flounder when faced with the need to be independent and personally responsible.

While most schools did not set about consciously to reform their institutions around the issue of work - schools seldom respond quickly and consciously to major national reports, no matter how prestigious the sources - work became commonplace among high school students.[3] This came about in large measure as a result of the demand for student labor by the burgeoning fast food industry. Given the economics of this particular industry, high school students willing to work for minimum wages and without extensive fringe benefits are virtually the only labor force available.[4]

Let us now provide a second contextual strand, the piece which caused us to examine more closely the issues. While serving with the North Dakota Task Force on Basic Skills during 1977-78, we heard a number of presentations by school administrators and teachers that focused on the "increasing difficulties in sustaining student's interest in school when so many worked extensive numbers of hours." By 1978, this work phenomenon was beginning to filter into their consciousness. While the school people believed that the percentage of students working "might be as high as 50%" and that "many worked as many as 40 hours," no one had any empirically derived information. We chose to examine this issue and its implications, if any, for schools. Supported by the State Department of Public Instruction, the University of North Dakota Bureau of Educational Research and Services, and two of the State's larger school districts, we surveyed 2056 juniors and seniors in four schools. They provided us with a great deal of information about themselves, their work, levels of satisfaction, participation in school activities, educational aspirations and the like. To check the reliability of our survey data, we conducted personal interviews with a large sample of those who completed the initial survey. We also interviewed a cross section of teachers representing all of the subject fields in the schools involved, as well as, a sample of the parents of juniors and seniors in each of the schools. Finally, we interviewed a sample of the employers of high school students. Our last data source was the school records of the students. Needless to say, our data base was enormous.

As noted in the introduction, we will focus in this article on teachers' responses to work and possible implications for schools, a very small but important part of our research. Before proceeding to this, we will present, without comment, some basic background data.

How Many Students Are Employed:
(Percentages)

	Total	Male	Female
Employed	68.1	69.0	67.0
Not Employed	31.9	31.0	33.0

How Many Hours Per Week Do Students Work?
(Percentages)

	Total	Male	Female
1-10	11.6	11.2	12.1
11-15	18.1	12.9	23.7
16-20	33.0	32.1	34.0
21-30	29.9	33.8	26.2
Over 31	7.5	9.8	3.9

Where Do High School Juniors and Seniors Work?
(Percentages)

	Total	Male	Female
Restaurant/Fast Food	41.0	36.6	45.8
Sales	13.8	9.6	18.3
Grocery/Supermarket	9.9	10.8	8.9
Custodial	8.6	14.2	2.6
Secretarial/Clerical	5.9	1.4	10.7
Service Station and Kindred Activity	5.7	10.9	-
Building Trades	4.0	7.1	.6
Health Related	3.2	.3	6.5
Other	7.9	9.1	6.6

Teacher Responses

How do teachers respond to the growing understanding that large numbers of students do, in fact, work? Given the central role that teachers play in schools, this is a critical question. While our discussion relates only to the data we derived from our research, we are confident that the data represent teachers in general. Overall, teachers who participated in our research were almost unanimous in their belief that the number of employed students has increased over the last decade; however, they did not respond positively to this social phenomenon. Teachers of traditional subjects, e.g., math, English, sciences, were the most negative in their feelings about students working. Experienced teachers - those with fifteen or more years in the classroom, were, however, somewhat more mellow (less negative) in their attitudes.

The views which teachers have of students' participation and interest in school activities and academic achievement, the differences they note between working and non-working students in the kinds of courses they take, their attendance and their academic performance is particularly interesting as a measure of teachers' acceptance of this societal change. Although teachers don't believe work is the sole cause for change, they do believe it is an important factor in a decline of interest and participation in school activities. When teachers compare working students with non-working students, the employed are described as less inclined to take academic courses, to attend classes regularly and to perform well academically.

Several ideas run through teachers' discussions of these specific points and form a rationale for the generally negative attitude they have toward their students working. In the minds of the teachers whom we interviewed, a dichotomy exists between education and work. Work is not directly related to education; it is not a means of achieving formal educational goals. The jobs students hold are believed to be unrelated to most of school's content, so teachers report they seldom find ways of incorporating the content of students' work experience into the context of academic course work. Increasing student responsibility is a goal of high school teachers. However, they generally believe students who work become more responsible, but toward their place of work, not toward school.

Extensive student employment appeared to the teachers to be changing the roles of the high school and of adolescence. School seemed no longer to be the center of adolescents' lives, no longer the top "job" in their lives. School had become only one possible place where adolescents fit; work had become another. Locating jobs for students is a role schools have recently taken on, but which many teachers did not appreciate. Teachers of traditional subjects in particular, shared with us the view that schools should have little or no role in helping students find employment. They reported that, unless special personal or financial conditions existed, they did not encourage students to work. Instead, they often suggested to students that they reduce their working hours. If the school must have a role in employment, some teachers suggested, it should be a monitoring role, assuring fair pay, regulating hours, and supervising work conditions.

Employment also seemed to teachers to change the nature of adolescence. Work experiences placed high school students in adult roles taking time from their being adolescents, from their being inquisitive, from their excelling as students. This was a particularly strong concern for teachers in relation to students working more than fifteen hours per week.[5]

Students' jobs, and the money their jobs provide were, for some teachers, manifestations of a materialistic society. Jobs provided students with the money they needed for the material items they felt they had to have. Participation in school activities doesn't pay money; so, according to some teachers, school activities have been losing out in a popularity contest with paying jobs. Teachers who described students' jobs in these terms did not see students learning to use money well but instead saw them using it irresponsibly, wasting it on cars and clothes.

Teachers' classroom actions reflected the increased amount of student employment and the beliefs they held about the effects of this work. As already noted, teachers reported they did not encourage students to work and, unless they were teachers of vocational subjects, they seldom incorporated students' work experience into their classroom activities. They also reported that they had changed their expectations of students. One teacher believed that, if the same standards were applied now as were applied several years ago, "25-30 percent of the students would flunk." Another believed that, if more were demanded in courses, students would not take them; they would take easier ones. Student employment, however, was believed to be only one of the reasons expectations had been lowered; television and changing parent support of the school were also described as important factors in a lowering of expectations.

The changes for schools took several forms. Class time was used increasingly for tasks that otherwise would have been homework assignments. Direct teaching time had, therefore, declined. Lengthy assignments were few, deadlines for all assignments were often extended, and make-up work and tests were often required.

Implications

e is little congruence between these teachers' ions and the points of view of the various re- reports. Instead of seeking ways to have the school more actively ease the adolescent's transition to adulthood, many of these teachers prefer to emphasize the childhood aspects of adolescence and to regret their loss. Instead of viewing student employment as complementary to school activity, many of these teachers believe student work is detracting from students learning in school, diminishing the role of the high school.

Teachers and students are currently adapting the curriculum to accommodate the large role work is playing in students' lives. Teachers have reduced the amount of work expected from students for out-of-class study. Students often elect to take only those courses which best suit the time they have to spend in and on school. Taken to one curricular conclusion, these adjustments may lead to high schools which limit their schooling function to the provision of basic course offerings and a few extra-curricular activities.

School regulation of the amount of work high school students can accept is a less extreme alternative which many would support. Some teachers might view this school role as one which would allow high schools to better serve their more traditional roles in the traditional ways.

Neither of these responses appears adequate for meeting the educational needs of adolescents. In the first, high schools abdicate much responsibility by extremely limiting options for students. The second sets what appears to be a goal that cannot be achieved, so in effect would change nothing of the current practice, and haphazard accomodation.

A third option is in making students' work an integral and significant part of their education, relating school offerings to job-related experiences. If this option, one closely related to the reform proposals for secondary schools, is to become real, teachers need to be convinced of its merits. They must come to understand the nature of the work students do and to appreciate students in their responsible work settings.

Teachers can most easily begin to get closer to students' lives and educational needs by talking with students about their work, finding ways in which that work experience can be integrated with their academic and vocational course work. Another effort teachers and schools can make is to seek means for teachers to get into students' work places. Exploration of what students do at work and how they feel about what they do can be the bases for increasingly realistic and positive perceptions on the part of teachers and, perhaps, for increased incorporation of students' work experiences into classroom activities.

Closing Statement

Our purpose in this paper has been to share briefly an important aspect of our research; namely, the teacher responses to the growing involvement of high school students in the economic marketplace. To focus on teachers, however, is not to suggest that teachers alone can create the conditions necessary to help schools attend to this important evolving phenomenon more constructively. It is a broader issue which, ultimately, must respond to the societal purposes of the secondary school; something which educators and members of boards of education don't often take the time to consider. Certainly, a number of thoughtful suggestions have been previously put forth by several prestigious groups (see Footnote 2). Coupled with the reality that we found in our study we believe there exists a constructive basis for a serious examination of school and work.

[1]In regard to employment, readers might wish to read James O'Brien's "Education is Education, and Work is Work," Teachers College Record, Vol. 81, Fall 1979. O'Brien argues cogently that the high level of unemployment among 18-24 year olds has little to do with schooling, being instead a demographic related condition. He provides data to show that the population entering the labor market for the first time in the 70's, part of the earlier baby boom, exceeded to a great extent the supply of jobs.

[2]The major reports of the 1970's were: The Reform of Secondary Schools: A Report to the Public and the Profession, prepared by the National Committee for the Reform of Secondary Education (New York: McGraw-Hill, 1973); American Youth in the Mid-70's (National Association of Secondary School Principals: Reston, VA, 1973); Youth: Transition to Adulthood, Report of the Panel on Youth of the President's Advisory Committee (Washington, D.C.: U.S. Government Printing Office, 1973); and "Giving Youth a Better Chance: Options for Education, Work and Service. Report of the Carnegie Council on Policy Studies in Higher Education, Berkeley, CA, 1979. These reports all stressed the need for job placement programs, credit for work experience, flexible (even alternate day) schedules to accomodate work, etc.

[3]It is interesting to note that students were entering the world of work in increasing numbers during the 1970's without benefit of school initiatives and almost without notice. While sociologists such as James Coleman (Youth in Transition) and others involved in the major reports cited above bemoaned the fact that "students just didn't work," William Fetters collected data from 16,409 high school seniors in 1972 which showed that three/fourths were already working. (A Capsule Description of High School Seniors: Base Year Survey, Washington, D.C.: Superintendent of Documents, U.S. Printing Office, 1974.) We believe that this was a typical pattern with which schools did not, and have not, come to terms.

[4]Employers in this industry made it clear to us in interviews that high school students are, in general, the only persons who apply for their employment vacancies.

[5]As can be noted on p. , the majority of those who work do so more than fifteen hours per week, the average being closer to twenty-four.